FINANCIAL TIMES

EUROPE'S BUSINESS NEWSPAPER

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Which way next for the dollar, Page 14

NEWS SUMMARY

GENERAL

Soviets reject Chinese approach

The new Soviet leadership has rejected Chinese pleas for ending the deadlock in relations between the world's two foremost Communist powers.

Soviet leader Konstantin Chernenko has said that Moscow can make no agreement with China to the prejudice of the interests of third countries.

His statement is an indication that Chinese demands on Kampuchea, Afghanistan, and border troops, including those in Mongolia, will still not be accepted; and that the next round of Sino-Soviet consultations, which start next Monday in Moscow, can make only superficial progress. Page 18

Ustinov in India

Soviet Defence Minister and Politburo heavyweight Marshal Dimitri Ustinov today starts his delayed visit to India, which Western diplomats believe is intended to strengthen military and naval links. Page 16

Mitterrand's visit

French President François Mitterrand pays another visit to London today in his effort to help break the deadlock over EEC finance.

French school protest

The Archbishop of Paris, Cardinal Jean Marie Lustiger, led a mass protest along the Avenue de Paris in Versailles against the French Government's plans to integrate public and private education. Organisers said 800,000 parents and supporters took part. Page 3

Greens' platform

The West German Greens, the ecology party, adopted a radical platform attacking bureaucrats, bombs and butter mountains in the campaign for this summer's European Parliament elections. Page 3

Call for prosecution

Israeli Government hardliners are calling for the prosecution of moderate West Bank leaders who met Palestine Liberation Organisation leader Yassir Arafat. Page 2

Basque murdered

French police found the body of a Basque exile who had been beaten to death on a tennis court at Pau, near the Spanish border.

New South Wales poll

New South Wales Premier Neville Wran called a snap election for March 24, in which the key issues will be allegations of corruption in the state's Labor Party government, the judiciary and the police. Australian Prime Minister Bob Hawke gave an indication that there might be an early national election. Page 2

Yola toll 'near 1,000'

Government-owned New Nigerian newspaper said that up to 1,000 people had been killed in a week of religious violence in the north-east city of Yola, where fighting was still raging. Troops moved in on Friday against Moslem fundamentalists said to be using sophisticated weapons. Page 2

Plumming the depths

British fruit scientists are trying to propagate trees, using tissue culture techniques, from well preserved plums found in the wreck of the raised warship Mary Rose, which is more than 400 years old.

Highest pole vault

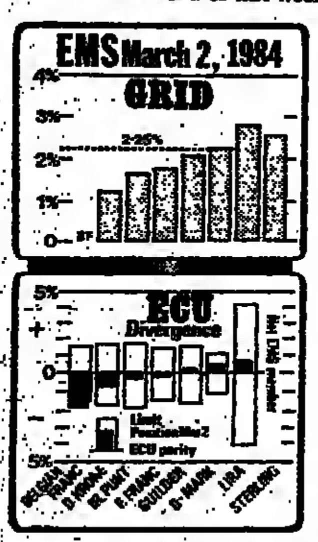
French pole vaulter Thierry Vigneron jumped a world's highest 5.85m (just over 15 ft 11½in) in the European indoor athletics championships in Gothenburg, but it cannot count as a world record because it was indoors.

BUSINESS

UK banks set aside £1bn for bad debts

UK BANKS: The four biggest, Barclays, National Westminster, Midland and Lloyds, will probably have to set aside more than £1bn ($1.49bn) to cover bad debts, at home and abroad, in 1983. Page 9

BELGIAN FRANC lost ground within the European Monetary System towards the end of last week,



reflecting switching out of that currency in case of any possible weekend realignment.

The Belgian National Bank continued to give support through direct intervention, and also the raising of some short-term interest rates.

However the franc remained close to its lowest permitted level against the D-Mark, and close to its maximum divergence spread within Ecu central rates.

The chart shows the two constraints on European Monetary System exchange rates. The upper grid, based on the weakest currency in the system, defines the cross rates from which no currency (except the lira) may move more than 2¼ per cent. The lower chart gives each currency's divergence from its "central rate" against the European Currency Unit (ECU), itself a basket of European currencies.

ARGENTINE Government is considering setting up a consultative body involving management and labour to help to secure the broadest support for its economic policies. Page 3

CHIEF EXECUTIVES in the U.S. are the highest paid in the world, but Swiss and West German companies pay their top level managers more, according to a survey. Page 3

OCCIDENTAL PETROLEUM is paying $333m to buy back some preferred stock in a move to strengthen its balance sheet. Page 18

UK PHARMACEUTICALS producers estimate that they are losing £100m ($149m) a year in home sales to companies that buy cheaply in Europe and re-import. Page 9

BRITISH Government is expected to cut its grants to help to promote high-technology industries. Page 8

SHORT BROS., the Belfast aircraft maker, is likely to be helped back towards private ownership by the U.S. Government's £115m order for Sherpa transport aircraft. Page 8

BRAZIL is expected to resume negotiations in Washington this week to try to reach agreement on a voluntary reduction of its steel exports to the U.S. Page 4

CABLE BELT, UK mining equipment company, is to build an overland conveyor system to take 2m tonnes of potash a year from the Dead Sea to the railhead near Nimona, Israel, in a contract worth about $20m. Page 4

INDONESIA: How an Anglo-Swedish consortium, including Balfour Beatty, succeeded in reviving a cancelled multi-million pound hydroelectric project in Java. Page 4

ATTACK MAY HAVE 'OMINOUS' SIGNIFICANCE FOR OIL SUPPLIES

Gulf tensions rise after Iraqi missile hits cargo ship

BY OUR FOREIGN STAFF

AN INDIAN cargo vessel no charter to Iran has been hit by an Iraqi missile near the port of Bushehr, it was confirmed at the weekend by the ship's owners in Bombay.

The attack was of potentially ominous significance for oil supplies because of the range at which it was carried out – some 200 miles (320 km) from the nearest Iraqi territory. Bushehr is to the south-east of Kharg Island, the main Iranian terminal through which 90 per cent of its exports pass.

Apeejay Lines, the owner, was quoted by Reuters as saying that tha 16,000 dwt APJ Ambika had been hit as it sailed under Iranian naval escort from Bushehr last Thursday. All 35 crew appeared to have been rescued, the company said.

Hajoteslam Hashemi Rafsanjani, Speaker of the Iranian Parliament, said yesterday that Iran had no wish to close the Strait of Hormuz, as it has previously threatened to do, but was keeping such a measure as a "final weapon" against the Iraqi regime of President Saddam Hussein. He claimed that a recent Iraqi attack on Kharg Island bad "failed to accomplish anything."

The attack no the Indian vessel was believed to be the first time Iraq had managed to hit a ship in this area – suggesting that it has the capability to interfere with oil traffic. Other confirmed strikes bave been in the vicinity of Bandar Khomeini, only about 80 miles from Basrah.

Iraq's naval commander, Commodore Abed Mohammed Abdullah, according to previous dispatches was quoted by the official news agency in Badhdad as saying Iran's ports would be kept under an effective blockade by naval and air forces. He claimed that the Iraqi Navy could "reach any ship" which did not comply with earlier warnings to avoid the war zone at the northern end of the Gulf.

Shipping companies "must realise this truth without venturing any more into trade with Iran because all they will reap will be definite losses," the commander said.

The conflict has been further inflamed by Iran's anger at what it clearly believes to be the use of chemical weapons by Iraq.

In London the British Foreign Office rejected Tehran's charges that the UK had been supplying chemical weapons to Baghdad as well as aircraft and tanks, as Iran has alleged.

Patrick Blum writes from Vienna: Doctors said they were puzzled by the injuries to 10 wounded Iranians flown to Vienna last Friday. "The symptoms could well be the result of some sort of gas or chemical weapons but we do not know for sure yet," one said.

Symptoms include peeling skin, respiratory difficulties, loss of blood and alterations in blood cells. Information is being sought from experts and laboratories abroad in an attempt to identify the exact cause of the injuries.

Kevin Done adds from Stockholm: Swedish doctors treating five Iranians said their injuries could have been caused by chemical weapons. They arrived on Saturday suffering from severe burns.

● M Charles Hernu, French Defence Minister, arrived in Kuwait yesterday for talks expected to be dominated by military co-operation, the Lebanese problem and the Iran-Iraq war, Reuters reported.

Kuwait, the closest Gulf Arab country to the frontlines of the 41-month old Gulf war, has recently been seeking to increase its defence capabilities.

Gulf shipping rates improve, Page 4

Syrian pact with Shia and Druze

BY NORA BOUSTANY IN BEIRUT

PRESIDENT HAFEZ Assad of Syria yesterday agreed with Lebanese opposition leaders Mr Nabih Berri and Mr Walid Jumblatt a consitutional mechanism for cancelling Lebanon's troop withdrawal agreement with Israel.

After a day of talks in Damascus with Mr Assad and Mr Elie Salem, Lebanese Foreign Minister, Mr Berri, head of the Moslem Shia Amal movement, said: "This agreement provides for the declaration of an abrogation by the Lebanese President, Amin Gemayel, and the Lebanese Cabinet without the need for abrogation by the parliament."

The proposed agreement would be conveyed to President Gemayel by Mr Salem and Mr Jean Obeid, Mr Gemayel's special envoy to Damascus, Mr Berri said. The two left for Beirut last night.

It was still unclear last night whether the formula agreed with the Lebanese opposition leaders had been cleared by Mr Gemayel during his talks with President Assad in Damascus last week.

What was evident yesterday, after the flurry of meetings in the Syrian capital, was that President Assad had succeeded in softening the rigid stands of the Lebanese opposition leaders.

Mr Berri said he was ready to join in national reconciliation talks with Mr Gemayel as soon as the Lebanese president repealed the accord with Israel. This agreement, reached on May 17 last year, provided for the withdrawal of foreign forces from Lebanon.

The Israelis have withdrawn to the Awali river hut continue to control south Lebanon. The Syrians continue to control the North-east.

Mr Jumblatt, leader of the mainly Druze Progressive Party, has still not indicated whether he would drop his demand for Mr Gemayel's resignation and trial for "criminal acts" against the Lebanese population.

However before leaving Damascus for Beirut, Mr Salem said that Lebanese national reconciliation talks would resume in Switzerland next week. Opposition sources said the talks were likely to start on Thursday or Friday.

The talks, aimed at giving Lebanon's Moslem and other minority communities a bigger say in the running of the country compared with the current political dominance of the Christians, broke down late last year.

Mr Suleiman Franjieh, a former Lebanese president and a Christian leader, told reporters at the weekend that an important announce-

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Gulf Oil and Arco explore bid terms

By William Hall in New York

THE BOARD of Gulf Oil Corporation, the fifth biggest U.S. oil company, is expected to hold an emergency board meeting in Pittsburgh today to discuss what Wall Street analysts believe is the biggest corporate takeover offer in U.S. history.

The meeting follows mounting speculation that Gulf, which has been trying to fight off a dissident shareholder group led by Mr T. Boone Pickens of Texas, is preparing to concede its independence in return for a friendly takeover by the Los Angeles-based Atlantic Richfield Company (Arco).

A combination of Gulf and Arco would create a massive new world oil company with combined annual revenues of $54.8bn, net income of $2.5bn, and worldwide oil and natural gas liquids production of around 1.3m barrels a day.

For the last six months, Gulf, one of the famous "seven sisters" which once dominated the world oil industry, has been fighting to remain independent as a group of shareholders led by Mr Pickens have focused attention on the group's poor financial performance and disappointing oil exploration results.

As behind the scenes battle for control of Gulf has mounted, Gulf's share price has risen from

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World oil consumption set to rise, Page 3; International credits, Page 17

Occidental buys back shares, Page 18

Florida may drop unitary tax scheme

BY NANCY DUNNE IN WEST PALM BEACH

FLORIDA, the U.S. state which most recently introduced unitary taxation, may be the next to abandon it. A panel appointed by the state governor to study the tax has recommended unanimously that it be dropped.

The panel defied a plea from Mr Bob Graham, the governor, for a delay to allow a commission appointed by President Ronald Reagan to make its report. The panel's recommendation will now be considered by the state legislature in April.

President Reagan's commission was set up in response to strong pressure from Western Europe and Japan to abolish the tax, which they feel unfairly penalises multinational companies. Twelve U.S. states impose the tax, the most important of which is California.

Florida's decision however, will be closely watched by UK companies, which account for 40 per cent of the state's foreign investment.

Mr Robert Lanzillotti, chairman of the panel and dean of the University of Florida's graduate school of business administration, said the panel had based its recommendations on the damage the tax has done to the state's business image. Under unitary tax legislation, corporations are taxed on their worldwide earnings.

"We were, in the panel's view, putting at risk an enormous amount of capital investment," Mr Lanzillotti said.

The group recommended different methods of raising revenue such as lifting an exemption from state sales tax for computer software and increasing the annual fees paid for filing company reports, Mr Lanzillotti suggested that the panel's report would receive strong support from the state's business community.

Florida officials have received hundreds of letters from enraged corporations about unitary tax. IBM recently sold land it owned in the state on which it had intended to expand operations. It also disposed of land in Nebraska, a state which is considering introducing unitary taxation.

Florida is traditionally an agricultural and tourism state, but has aggressively pursued a strategy of diversification over the last five years in which international trade has played a leading role.

Officials have attempted to convince corporations to locate their headquarters in the state, where they could be near plants using low-cost labour in Latin America.

The unitary tax law, passed with little advance warning last summer to finance the state's new education programme, has overturned those plans. Multinational and foreign businesses have threatened to curtail activities in the state or even to move out.

Only neighbouring Georgia, which has sought to lure away disenchanted Florida business, has benefited from the move.

Martens seeks new austerity measures

BY OUR BRUSSELS STAFF

MR WILFRIED Martens, Belgium's Prime Minister, called his senior ministers into secret session at the weekend to work out a new austerity programme designed to trim the Government's financial deficit of BFr 507bn ($8.62bn) by BFr 200bn over the next three years.

The aim of the two-day negotiation was to create a series of economies which can be enacted by the use of the Government's special powers before they expire at the end of the month. The powers enable the Government to act by decree on economic matters.

The results of the talks will be presented to the full Belgian Cabinet, probably today.

Early settlement of the principles to be adopted on the economies revealed that the coalition had only restricted room for manoeuvre:

● Corporate competitiveness must not be affected, implying no increases in company taxation;

● Economies have to leave room for a growth in employment – 14.7 per cent of the working population is jobless;

● The poorest have to be protected by the social security system and sacrifices must be evenly spread.

The ministers of four parties – the Flemish and French-speaking wings of both the majority Christian Democrats and the Liberals – agreed however, that the austerity programme should run until the end of 1986.

This implies that if the parties hold together over the details of the package, they will present a united front at the next general election, scheduled for the end of 1985.

But the Liberals have been pressing unwilling Christian Democrats to accept economies solely on the side of expenditure, leaving the existing tax structure alone. It has seemed clear, however, that the coalition will not be able to hold the deficit down – it needs nearly 12 per cent of Belgium's Gross National Product (GNP) to finance – without raising social security contributions and selectively trimming benefits.

To hold the coalition together, the parties may also be forced to agree a truce on Flanders-Wallonia communal rivalry, as it is manifest in language disputes, especially on the linguistic border, which effectively divides Belgium in two.

Settlement of the budgetary and communal questions are seen in Brussels as essential to stabilise the Belgian franc on the exchanges and act as a trigger to new private-sector investment.

Protest on Japanese typewriters

By Alan Friedman in Milan and Paul Cheeseright in Brussels

EUROPE'S major typewriter manufacturers have filed an application before the European Commission to stop "unfair dumping practices" by several Japanese producers of electronic typewriters.

Olivetti, the leading office automation group, said on Friday that the Committee of European Typewriter Manufacturers (Cetma) had filed an application for the initiation of a proceeding against Japanese producers who had violated the General Agreement on Tariffs and Trade (Gatt) rules.

The committee includes companies such as Olivetti, Olympia, Triumph-Adler and Ericsson.

Although Olivetti provided no specific allegations of dumping practices, it said that "by building up high production capacity and by price under-cutting, at present approximately 10 Japanese producers are trying to gain a dominant position in the European electronic typewriter market."

Olivetti said at the weekend that while the European industry wel-

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UK groups unite in channel tunnel campaign

By Richard Johns in London

FIVE leading UK construction companies have joined forces to campaign for a twin single-track railway tunnel under the English Channel with roll-on, roll-off facilities for vehicles.

Balfour Beatty, Costain, Tarmac, Taylor Woodrow and Wimpey were previously divided into separate groups (Costain with French interests), but they have now united to form the Channel Tunnel Group (CTG), which aims to put stronger pressure on the British Government to approve what the construction industry regards as a vital project.

The start-up cost is put at £1.9bn ($2.8bn) – at 1983 prices – but actual expenditure could amount to £4bn to £5bn. The group would not necessarily bid collectively for the UK half of the work, which is likely to be put out on a selected tender basis.

The British and French governments are awaiting finalisation of a study on the financing and ownership of the project, which is being undertaken by the Midland Bank, the National Westminster Bank, Banque Indosuez, Banque National de Paris and Credit Lyonnais. It is expected to be completed by the end of this month

In 1980, the British Government said that the UK involvement would have to be financed by the private sector. It will not offer any state guarantee or public funds.

At the weekend, a spokesman for CTG said that "it represents a notable first in the construction industry for five companies of this stature to act as one in support of a specific project." They have a combined turnover of about £4.3bn.

It is estimated that the construction period for the proposed project would be six years.

It involves two tunnels, each seven metres in diameter, bored about 40 metres under the seabed.

It is planned that trains would operate at five-minute intervals with a capacity to carry 3,600 cars an hour in either direction.

Journey time for the ferry trains has been calculated at 25 minutes. Rail passengers from London would be able to reach Paris in four and a half hours.

CTG is campaigning for the more modest of two proposals made for linking the UK and France. The EuroRoute proposed by Mr Ian McGregor – now the chairman of Britain's National Coal Board – when he was the British Steel Corporation's chief, would cost about twice as much.

CONTENTS

OVERSEAS NEWS

Call to prosecute West Bank leaders who met Arafat

BY OUR TEL AVIV CORRESPONDENT

HARDLINERS in the Israeli Government want to prosecute a delegation of moderate West Bank leaders who met Mr Yasir Arafat, the Palestine Liberation organisation (PLO) chairman, to voice their support for peace negotiations between Jordan and Israel.

Mr Yitzhak Shamir, Israel's Prime Minister, aware that such a move would trigger international uproar, is reported to be resisting the pressure but has yet to make a public statement.

The issue's sensitivity was shown yesterday when the Cabinet discussed tha matter. To assure there were no leaks, it convened as the Ministerial Defence Committee, whose deliberations are barred by law from publication.

A Cabinet statement asserted the delegation had violated military law in the Israeli-occupied West Bank, which proscribes contact with the PLO. "Instructions were issued in accordance with government policy," it added, but did not disclose what these were.

The delegation of 38 moderates, among them Mr Elias Freij, Bethlehem's Mayor, met Mr Arafat in Amman last week. Some of them said they had urged the PLO chief to give King Hussein a mandate to enter peace negotiations with Israel.

Tha Israeli Government itself has repeatedly called on the king to begin a peace dialogue.

Mr Ariel Sharon, Minister Without Portfolio, who is increasingly critical of Mr Shamir's leadership, and who as former Defence Minister, was responsible for the West Bank, said it was the first time anybody from the territory had dared to meet publicly with the PLO.

The Cabinet also discussed the Lebanon situation, but no new stepa were disclosed. Eleven Israeli soldiers were wounded by three explosions in the South Lebanese port of Sidon yesterday, the army said.

It also announced that last Friday, Israeli soldiers shot dead two motorists south of Sidon. The army said the two men tried to flee after ignoring a warning to identify themselves.

'Up to 1,000' killed in Nigeria violence

LAGOS—Up to 1,000 people have died in a week of religious violence in the north-eastern Nigerian city of Yola, where fighting is still raging, the government-owned New Nigerian newspaper said yesterday.

Hospital officials gave a figure of 250. A government official said on Wednesday that 137 people died in the disturbances, which began last Monday.

The newspaper said about 500 bodies had been removed from the Yola hospital for mass burial. The News Agency of Nigeria said 100 bodies were buried in a mass grave on Tuesday.

Troops moved in on Friday to quell fighting by Moslem fundamentalists who had regrouped and were using "sophisticated weapons" to beat back police, a police spokesman said.

The religious violence, the country's third outbreak in just over three years, was started by followers of the Moslem fundamentalist leader, Muhammadu Marwa Maitatsine, police said.

He was killed in rioting in the northern city of Kano three years ago. An official report said more than 4,000 people died in these riots, which were suppressed by the army.

The newspaper said the streets of Yola were littered with bodies of suspected Moslem fanatics lynched by mobs. Many people had been killed in cross-fire when they emerged from the rioters' enclave.

Hundreds of men, women and children who fled their homes were camped in refugee sheds in police and army barracks as well as an open field in one of the city's districts, the newspaper added.

Reuter

Snap election called in New South Wales

By Michael Thompson-Noel in Sydney

MR NEVILLE WRAN, Labor premier of New South Wales, yesterday called a snap state election for March 24, in which the key issue will be allegations of widespread corruption in New South Wales government, judiciary and police.

At the same time, Mr Bob Hawke, the Australian Prime Minister, gave the strongest possible hint that he would call an early general election, probably next March.

The Hawke government in Canberra has ruled for exactly one year. In New South Wales, Mr Wran—who is president of the Australian Labor Party—claims that the state government has been "hounded" by an orchestrated opposition and media campaign alleging widespread corruption.

Despite the allegations, Labor has a strong lead in the polls, and should withstand the challenge of the Liberal and National parties, which would need to win 22 seats in the 99-seat state parliament to unseat Labor.

Mr Nick Greiner, leader of the state Liberal Party, said Mr Wran was pushing a "panic button" by calling an election six months early. In recent weeks, the Liberals have promised to "clean up New South Wales."

Of the prospect of an early general election, Mr Hawke said yesterday that a half-Senate election must be held by May 1985, and that it made sense to hold a House of Representatives election at the same time, as had happened 22 times in the past.

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Half a million march as protest grows over French schools

BY PAUL BETTS IN PARIS

MORE THAN half a million parents, priests, and political leaders of the right marched down the imposing Avenue de Paris leading to the palace of Versailles yesterday in protest against the left-wing Government's plans to integrate private and public education.

The march was the climax to a series of demonstrations in the past week in support of private education in France. Parents opposed to the Government's plans to integrate catholic schools in the state system launched their protest in Bordeaux with a mass march; then they moved to Lyon and Rennes and, to the surprise and shock of the left, more than 200,000 demonstrated in Lille, the political fief of M Pierre Mauroy, the Socialist Prime Minister.

The organisers claimed more than 800,000 people at yesterday's protest. For many it was probably their first time demonstration and perhaps the last.

One banner reminded President Mitterrand that he had been a private school pupil.

Faced with the growing protest against their plans, the Socialists, through their party secretary, M Lionel Jospin, have indicated that the Government would adopt a flexible approach to the explosive problem. The feeling is that the Left is gradually backing down from its electoral promise of three years ago of creating a "united lay public school system."

But in spite of increasingly conciliatory noises from the Government in recent weeks, the supporters of the private system suspect that the left (especially the militants of the largely pro-Socialist teachers' union) is seking to integrate the private schools in a backdoor manner.

Among their objections is the proposal to absorb private school teachers in state service by giving them the status of public employees.

The Archbishop of Paris led yesterday's demonstrations. In a newspaper interview yesterday he called on M Mitterrand to make a gesture towards the demands of a vast number of families for the right to choose how to educate their children.

President Mitterrand flies to Britain today for talks with Mrs Thatcher aimed at breaking the deadlock over the EEC budget, Our Paris Staff writes. His visit follows a series of talks with other EEC leaders to work out a compromise. France says that progress has been made on some important points but the problem of Britain's budgetary contribution remains unsolved. M Mitterrand wants to resolve the crisis before the summit of community leaders in Brussels at the end of this month.

Alp passes to be watched

BY JAMES BUXTON IN ROME

ITALY, West Germany and Austria are to set up a joint commission to monitor the problems of border crossings at the Alpine passes.

The decision followed a meeting in Rome at the weekend between Sig Claudio Signorile, the Italian Transport Minister, and Herr Werner Dollinger, his West German counterpart, who was supported by his colleague from the regional government of Bavaria.

The Austrian Government said later it would take part in the commission which will aim to speed up border crossings by road and rail, now that Italy has decided on measures to make customs procedures a little less burdensome.

Other countries, such as France and Switzerland, could be asked to join the commission later.

Sig Signorile is to meet his French and Austrian opposite numbers this week. On March 22 EEC transport ministers meet in Brussels in the hope of agreeing further reductions in European customs procedures.

Argentina considers 'social contract'

ARGENTINA'S Radical Government is considering setting up a permanent consultative body involving both sides of industry, in a move aimed at securing the broadest support possible for its economic policies, **Jimmy Burns reports from Buenos Aires.**

In a letter to leaders of the main trades union organisations, the General Confederation of Labour (CGT), President Raul Alfonsin alluded to what could eventually become a formal "social contract" to help the Government implement a more effective prices and incomes policy.

The initiative coincides with signs of a combination of uncontrolled price rises and mounting pressure for substantial wage increases, undermining the Government's attempt to reduce the country's 433 per cent inflation to two-digit figures by the end of the year.

Nicaragua warning

SR TOMAS BORGE, Nicaragua's Interior Minister, warned over the weekend that U.S.-backed counter-revolutionary groups will step up their attacks against economic targets in the country in the coming weeks, **Tim Coone reports from Managua.**

Canada leadership

A successor to Mr Pierre Trudeau, Canada's Prime Minister, is to be chosen at a Liberal Party leadership convention to be held in Ottawa from June 14 to 17, **Nicholas Hirst reports from Toronto.**

The party's national executive chose the date and place for the convention late on Saturday, following Mr Trudeau's decision earlier in the week to step down as soon as a new leader was chosen.

Marc Rich case move

A U.S. federal judge has thrown out a defence request for a wide-ranging "gag" order which would have restricted information about the pending trial involving the Swiss-based Marc Rich commodity group, on charges including alleged evasion of $48m (£34m) in U.S. taxes, **Paul Taylor reports from New York.**

Swedes to focus on research

BY KEVIN DONE, NORDIC CORRESPONDENT, IN STOCKHOLM

THE SWEDISH Government is increasing its spending on research and development despite cutbacks in other parts of state expenditure and is setting new priorities for the national research effort.

Research and development is to be exempted from the general government order to state departments to cut spending by 2 per cent across the board.

In addition, an extra SKr 150m ($19.3m) a year is to be pumped into the state research effort over the next three years in new resources, over and above protecting existing expenditure against inflation.

Total spending on research and development in Sweden is expected to be around SKr 18bn in the 1983-84 fiscal year, of which the state will account for some SKr 9.2bn.

The total R&D effort amounts to around 2.5 per cent of gross national product (GNP), a level of research spending rivalled only by a handful of industrialised countries.

The increased state spending is being directed in particular towards basic research, and Mr Ingvar Carlsson, Deputy Prime Minister, is to begin talks soon with industry to try to increase the private sector's involvement in basic research.

He has rejected warnings, from some parts of the Swedish research establishment, that increasing industrial involvement in state-funded R&D could turn universities and research institutions into consultants for industry.

"We have high hopes for the research institutions, possible contributions to the renewal of Swedish industry and to stimulate the Swedish economy," said Mr Carlsson.

Four areas have been given priority for the state research effort: information technology, materials technology, biotechnology and environment protection.

Research funds channelled through the Industry Department SKr 2.1bn over the next three years – will be devoted the these areas plus engineering and production technology, pulp, paper and forestry technology, chemicals and medical technology.

As a relatively small country – it accounts for 1 to 2 per cent of total world R&D spending – Sweden is also taking steps to improve its access to the international exchange of research knowledge.

Increased resources are to be provided to the technical and scientific attaches at Swedish embassies around the world. In addition, an urgent study is to be made of ways to give foreign researchers favourable income tax treatment in order to attract more foreign experts

The government study accepts that the country's income tax rates, the highest in the world, have been a major obstacle for Swedish companies trying to attract top-flight research and development workers.

Companies 'focus on short term'

BY OUR NEW YORK CORRESPONDENT

ABOUT HALF of a representative sample of the leading businessmen in the U.S. believed that the emphasis placed on financial indicators in industry forces companies to focus too closely on short-term thinking. At the same time, however, individual executives claim overwhelmingly that they themselves achieve a correct balance between the short and the long term.

These conclusions are part of a new survey conducted by the Conference Board, a company-sponsored economic analysis organisation, on the way in which U.S. corporations measure their performance. The study follows extensive controversy in the U.S. on the question of whether Japanese industry is gaining a technological lead by taking a longer term view of financial results.

In the responses, mainly from chief executives, companies placed heavy responsibility on the investment community and the media for the emphasis on short-term analysis.

"The pressures applied by the financial community for quarterly earnings is severely damaging most companies' view as to what the critical measure of performance should be," said one petroleum company president.

Greens adopt radical Strasbourg platform

BY RUPERT CORNWELL IN BONN

THE WEST German Greens party yesterday overwhelmingly backed a radical platform for the European election campaign this summer, which condemned a Europe "of bureaucrats, bombs and butter mountains."

But a special two-day national congress in Karlsruhe postponed a debate of the crisis which is gripping the chaotic and splintered Greens parliamentary party in the Bundestag in Bonn.

The party has chosen Herr Friedrich Wilhelm Graefe, a 41-year-old independent, to head its list for the campaign for the Strasbourg parliament. But the most important decision taken this weekend calls for all Green Euro MPs to surrender their seats to someone else half-way through their five-year term.

The Karlsruhe congress only approved the move by 437 votes to 347. The strength of the opposition is a sign of the split over adopting a similar rule for Green national MPs—a split which goes close to the heart of the party's divisions.

Moderates, who have successfully piloted the party into an alliance with the Social Democrats in the state of Hesse, broadly oppose the move.

U.S. chief executives 'highest paid'

By Terry Dodsworth in New York

WHILE CHIEF executives in the U.S. are by far the best paid in the world, both Swiss and West German companies pay their top level of managers more, according to the latest Fortune Magazine survey of executive pay.

French executives come fourth in the payments league, expressed in dollar equivalents, followed by Canadian and Brazilian managers. UK companies pay only the ninth highest salaries at $58,800 for upper middle managers, although in net after-tax terms, British executives emerge as seventh in the league.

Because of the recent strength of the dollar, U.S. salaries look even more prepossessing at present, says the survey, which gives average annual pre-tax compensation for American upper middle managers as $112,000 (£75,000) in 1983.

At the same time, senior U.S. executives benefit much more than their peers overseas from bonuses.

Industrial world 'consuming more oil'

By Richard Johns in London

OIL CONSUMPTION in the industrialised world could rise by 5.7 per cent in the first quarter of 1984, according to estimates of the International Energy Agency.

The projected increase is attributed largely to the U.S. and Canada. Provisional data published by the IEA in its latest monthly market assessment indicate that North American consumption will be up 12 per cent above the 1983 level because of a recovery in economic activity and a colder than normal winter.

It looks as if it will be 7 per cent up in the Pacific region. But a decrease of 3 per cent is estimated for Europe.

World oil supply is reckoned by the IEA to have fallen from the 1983 peak of 46.5m barrels a day recorded last October and November to 45.5m b/d in January and February, with members of the Organisation of Petroleum Exporting Countries (Opec) suffering nearly all of the decline.

Opec crude oil output for the first quarter of 1984 is put at 17.9m b/d (plus 1m b/d of natural gas liquids), compared with 18.9m b/d in the last quarter of 1983 and an average for the whole of last year of 17.5m b/d.

Stocks on land in member states of the Organisation for Economic Co-operation and Development were drawn down at the rate of 800,000 b/d in the last three months of 1983, and the rate in the first three months of 1984 looks as though it will be 1.5m b/d.

Frogman hunt

Swedish soldiers were using tracker dogs in a hunt for frogmen, suspected of coming from a foreign submarine, seen near the Karlskrona naval base.

WORLD TRADE NEWS

Brazil and U.S. near deadline on steel exports

By Andrew Whitley in Rio de Janeiro

BRAZIL IS expected to return to the negotiating table in Washington this week in a second attempt to reach agreement with the U.S. on a voluntary reduction of its steel exports to the American market.

The Brazilians are under pressure to reach agreement before next Friday, when temporary import surcharges of between 53 per cent and 100 per cent on heavy steel plate are due to come into permanent effect.

A senior Industry and Commerce Ministry official warned last week however that Brazil may be forced to abandon the negotiations which opened in mid-February and were suspended a few days later, if the U.S. persisted in offering only a low quota for Brazil's important flat steel products.

Sr Marcos Jose Marques, who headed the delegation in the first round of talks, said that beyond a certain point, it would not make sense for Brazil to reach an accord. "If we reach a poor agreement this will set a precedent for other agreements we shall eventually have to make with other countries," he said. Brazilian steel exports to the EEC are also coming under pressure.

Privately, Brazilian officials are saying that an impediment in the way of a steel pact with the U.S. is a row said to be going on between the U.S. Commerce Department and the Special Trade Representative's office over how generous the U.S. can afford to be with Brazil.

They also believe that U.S. election considerations are hindering the chances of reaching agreement. Brazil's opening position in last month's talks was to seek a ceiling between last year's exports of 900,000 tonnes and the anticipated 1984 figure of 1.2m tonnes.

● Cosipa, Brazil's leading steel producer and exporter, which last month suspended its exports to the U.S. following the imposition of import surcharges on its plate, estimated its losses from a three-day strike over pay which ended on Thursday at $8.3m.

How the carrot and the stick saved a £240m project

BY CHRIS SHERWELL IN SINGAPORE

AFTER TEN months of anguished negotiations, an Anglo-Swedish consortium which includes Britain's Balfour Beatty has finally sealed a deal with the Indonesian Government to save the cancelled multi-million pound Mrica hydroelectric project in central Java.

"I feel a bit shell-shocked," said a banker after a final exchange of letters at the weekend. "They are tough negotiators." The story of the saving of the project is a good example of what international co-operation and judicious use of the carrot and stick can achieve.

Work on the 180Mw project, worth £240m, is to resume as soon as possible. Contractors for the civil works are Balfour Beatty—part of the BICC group—and Skanska of Sweden, who formed a joint venture called Sabcon. Asea of Sweden and Boving of the UK were to do electrical and mechanical work.

The project involves the adaptation of an original Soviet design for the scheme by Sweco of Sweden and Engineering and Power Development Consultants of the UK. Civil work began towards the end of 1982 and was cancelled outright by the Indonesian Government six months later.

The cancellation was part of a rephasing of some four dozen large capital intensive projects following the drop in world oil prices. Indonesia, Asia's largest oil and gas exporter, faced a debt crisis. Sabcon enlisted the support of the UK and Swedish Governments to try to save the project, where 2,000 men were already at work and equipment was in place.

A sustained display of patience and brinkmanship followed, as the consortium tried carrot and stick to retain its business while Indonesia tried to get better terms.

At various key moments Mr Norman Lamont, UK Trade and Industry Minister, senior Trade Department officials and personnel from the Export Credits Guarantee Department travelled to Jakarta. Sweden sent similar people, and the large teams of negotiators slowly but inexorably pushed the matter to a conclusion.

The first official confirmation of a breakthrough was in President Suharto's January budget speech, but nobody could have guessed that the last phase, involving the Indonesian State Electricity Company, and the Ministry of Finance, would be so difficult.

At the heart of the issue, it seems, was the project's viability. There is no doubt that it will be practically useful; Mrica is one of many projects aimed at fully electrifying the villages of Java, one of the world's most densely populated islands. But the more important question was cost.

The Indonesians now seem to have gained a more worthwhile project than they had before. The key changes in the contract relate to timing, which affects the financing. The contract was signed on May 14 1982, the day before international export credit interest rates went up, and was reckoned then to be worth close to £300m.

Its value is now put at £240m. Barclays Bank International, the sole lender on the British side, is giving ECGD-backed buyer credits worth £127m to Indonesia, one of its biggest single loans ever in the region. This covers Balfour's £80m civil contract, Boving's £31m turbines deal and the design contract.

The value of the work being done by Sweden, where the two banks involved are Svenska Handelsbank and SEB, is lower. The British Government has also offered a £12m outright grant as a proportion of the electromechanical costs.

The most difficult aspect of the talks concerned the terms of the export credits under the amended deal. In the end the interest rate was kept unchanged at 7¾ per cent, but the repayment period was stretched to 13 years from the time of completion, up from 10 years.

With the parties also agreeing to add two years to the original five-year period of construction, this amounts to a very attractive deal for Indonesia. Even so, a last-minute hold-up appeared to occur last week when it suddenly emerged that, while both Indonesia and Sabcon were anxious for work to resume, both needed assurances over the financing arrangements.

This was settled within a few days by Sweden, but took longer in Britain because of different procedures. The exchange of letters last Saturday means work will at last resume, to the relief of all.

The early resumption is important because of the weather at this time of year. It is drier and river diversions can be tackled more easily. At the end of the negotiations, every day was starting to count.

"It's been a good example of industry, governments, embassies and bankers working as a team in a multinational context," said one diplomat last week. The will to succeed had finally won through.

UK company wins Dead Sea deal

BY MAURICE SAMUELSON

CABLE BELT, the British mining equipment company, is to build an overland conveyor for carrying potash from Sedom on the Dead Sea through the wildest part of Israel's Negev desert.

The Dead Sea Chemical Works is understood to have awarded the contract, thought to be worth about $20m, after five years of negotiations with rival British, South African and U.S. concerns.

The 11-mile conveyor, said to be the longest in Asia, will climb 3,000 feet from the lowest point on the earth's surface, to deliver 2m tonnes of potash a year to the rail-head near Dimona. At present, the Dead Sea works uses a fleet of lorries to haul the potash up long winding roads.

Cable Belt's conveyor will present severe engineering problems since its route crosses deep ravines and wadis and two 600 ft high escarpments.

The company, part of the Laird Group, is based at Camberley, Surrey, and has won similar projects in the Americas, Africa, Australia and India. It specialises in an unconventional system, separating the carrying job of the belt from the means of driving it.

Competitive terms provided by the Export Credits Guarantee Department helped to win the Israeli contract for Britain. The ECGD has authorised loans at 9 per cent interest repayable over 10 years for the project. N. M. Rothschild acted as Cable Belt's financial advisers on the project.

There had also been strong pleas from the Israeli Transport Ministry that the road link from Sedom should be replaced by a new stretch of railway. However, this was rejected as too costly.

French radar success

BY OUR RIO DE JANEIRO CORRESPONDENT

THE BRAZILIAN Aviation Ministry has signed a FFr 400m (£33m) contract with Thomson-CSF, the French state-owned electronics and defence group, for the installation of the next stage of its air traffic control system.

The contract involves long-range radar stations covering the North and North-east of the country, as well as the training of personnel and installation of control centres. It represents a continuation of work begun in 1972 by the French company.

Michael Donne adds: The UK Civil Aviation Authority has placed an order worth £1.4m for new Instrument Landing Systems with Thomson-CSF, rejecting a bid by Racal of the UK. The five systems will be used in trials at several UK airfields — Heathrow, Stansted, Dunsfold, Bletchley and Gatwick. If the trials are successful, a further follow-on £4m order for systems for 12 airfields will be placed. Part of the order is likely to be built in the UK.

The CAA's decision to award the initial contract to Thomson-CSF is believed to have been based on the fact that it was only the French system that met the UK's needs.

Tariff aid for Nicaragua

BY TIM COONE IN MANAGUA

COLOMBIA has signed a trade agreement with Nicaragua giving preferential import tariff treatment to a list of 20 non-traditional Nicaraguan export products.

Tariffs are to be reduced to a minimum or eliminated entirely and the agreement is likely to be the first of several to be arranged between Colombia and other Central American countries.

Sr Rodrigo Marin Bernal, Colombia's Minister for Economic Development, said that the agreement was aimed not only at achieving a better trade balance between the two countries, but also because it was recognised that to achieve peace in Central America it was necessary to follow policies that addressed the social and economic problems of the region.

Trade between Colombia and Nicaragua has been valued at between $2m and $13m over the past five years. The new tariff agreement will cover products such as chlorine, hydrochloric acid, cotton, pesticides and tobacco.

SHIPPING REPORT

Gulf rates improve

BY ANDREW FISHER, SHIPPING CORRESPONDENT

CONTINUED tension in the Gulf last week pushed up rates for large tankers, though the market in other oil-loading areas remained slack.

Galbraith's reported that Shell set the pace by fixing an Ultra Large Crude Carrier (ULCC) for a 330,000-ton cargo from Kharg Island in Iran. "Subsequently," it said, "other charterers threw caution to the winds and covered ex-Kharg at considerably improved figures."

The Shell deal was for eventual discharge in either the West or the East at Worldscale 22 or 23.5 respectively, with an option of 30 days' storage at $13,000 a day. Other fixtures included a 230,000-ton cargo from Kharg Island to the West at Worldscale 27½ and one of 250,000 tons at Worldscale 28. Last month's rates were around Worldscale 20 for cargoes of this size.

Galbraith's said it did not believe the Strait of Hormuz would actually be blocked, as threatened by Iran if Iraq were to disrupt its oil exports. But owners could manoeuvre charterers into paying higher rates for oil shipped from Iran. Last week's reported fixtures from the Gulf totalled 23 against only 11 the week before.

On the dry cargo side, recent expansion of coal and iron ore business was welcomed by owners but had little effect on rates, said Matheson (Chartering).

World Economic Indicators

FOREIGN EXCHANGE RESERVES (US$m)

	Dec. '83	Nov. '83	Oct. '83	Dec. '82
USA	6,289	6,914	6,952	10,212
W. Germany	37,320	37,907	38,279	39,620
Japan	20,364	20,161	20,444	19,172
U.K.	8,718	8,775	8,967	9,674
Italy	18,525	18,335	17,753	12,618
Netherlands	8,702	8,707	8,730	8,662
Belgium	3,776	3,843	3,937	2,824
	Nov. '83	Oct. '83	Sept. '83	Nov. '82
France	18,831	18,702	18,631	11,454

Source: IMF

Congress to confer on export control Bills

By Nancy Dunne

A JOINT Congressional committee is expected to start work this week on resolving the differences in U.S. export control legislation. A Senate Bill which differs in many ways from what the White House wants was passed late last week.

Of particular concern to the U.S.'s trading partners will be the final form of the provision governing the President's authority to impose import controls. While the House rejected attempts to provide for such controls, the Senate approved them after a complicated compromise.

If the Senate version is accepted by the conference committee, the President could slap import controls on non-Gatt countries. For violations of national security he could impose them on individual companies, providing a majority of members of the CoCom (the Paris based body which vets militarily sensitive sales) agrees that multinational rules have been violated.

On the controversial issue of the President's authority to impose extraterritorial controls, both Bills limit this power in foreign policy cases, but allow their imposition for reasons of national security.

Many disputes between hardline anti-communists who want stiffer controls and business interests, which want rules relaxed, remain to be resolved by the committee.

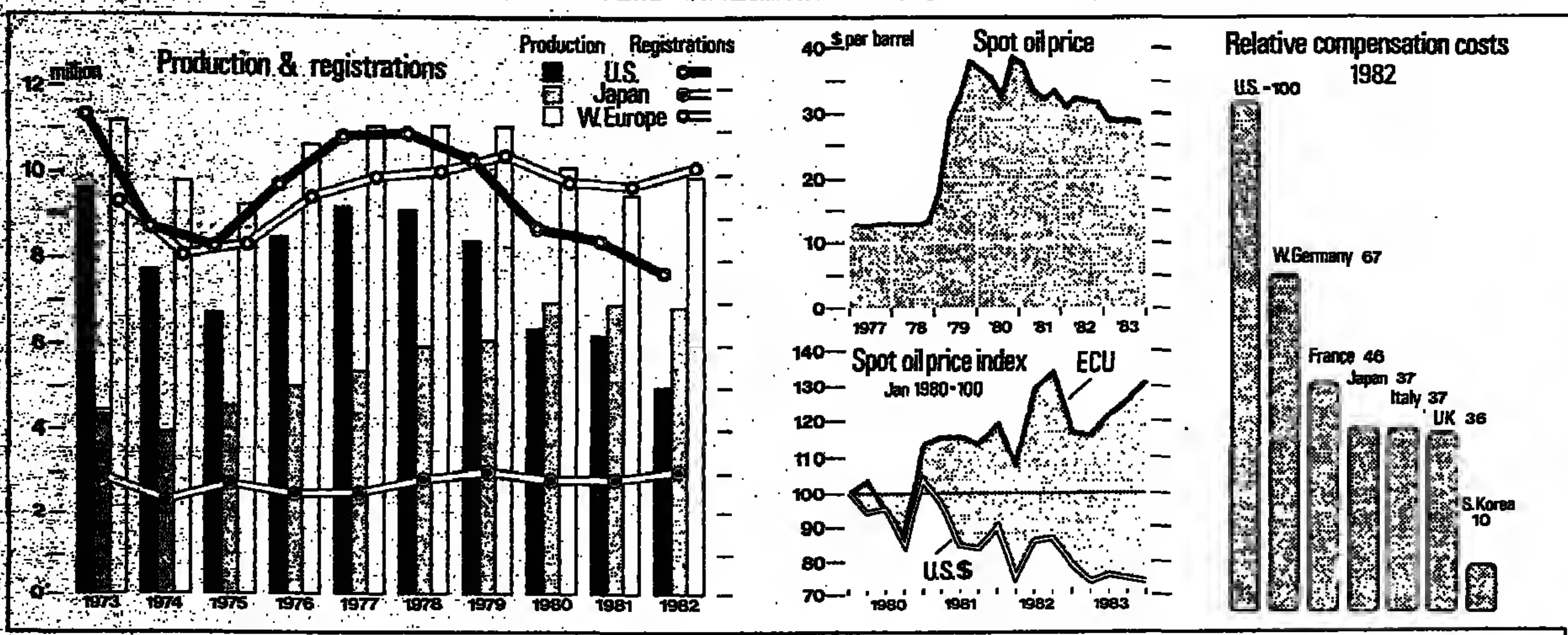
The house bill would ease restrictions on East-West trade, but place restrictions on U.S. trade and investment in South Africa.

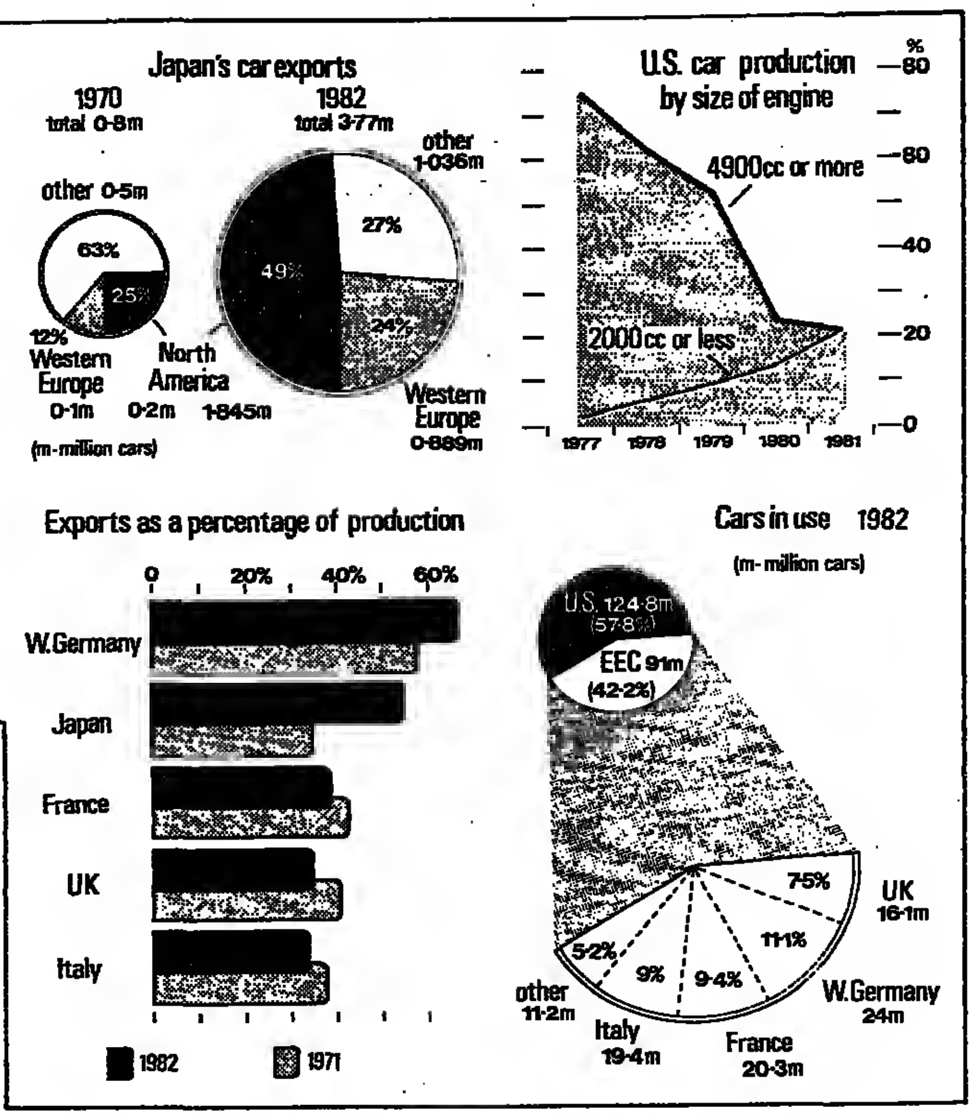
Hong Kong utility out of China project

HONG KONG Electric Holdings, the smaller of the territory's two power utilities, says it does not want to participate in a nuclear power station planned in the Guangdong province of China, Robert Cottrell writes from Hong Kong.

Mr Paul Channon, Britain's Trade Minister, said in Hong Kong last week that he expects General Electric Company of Britain to win a major contract in the project. GEC must bid by March 15.

STATISTICAL TRENDS: CARS





Production shifts into higher gear

Led by strong growth in the U.S. and continued growth in Japan, the recovery in the world economy began in 1983 following the recession of 1981-82. In the U.S. this was based initially on a boom in consumer spending and in Japan on growth of exports.

The recession in the car production industry started earlier than the general downturn in the OECD economies and in industrial production, particularly in the U.S., and was more severe.

However, the turnround in 1983 was dramatic—with production up nearly 30 per cent in the U.S., 18 per cent in the UK, and slight increases in West Germany and France. This still leaves production levels well below the levels of the 1970s in the U.S. while Japan's production continued its upward trend after two years of slight decline.

Profits for the major U.S. manufacturers in 1982 brought to an end years of losses, and preliminary results for 1983 show further substantial improvements.

MOTOR VEHICLE PRODUCERS	1982
General Motors	6,244,000
Ford Motor Co	4,328,072
Toyota	3,144,557
Nissan	2,760,000*
Volkswagen	2,130,075
Renault	1,986,701
Peugeot-Citroen	1,975,600
Fiat	1,300,000*
Toyo Kogyo	1,208,244
Honda	1,010,000*
Mitsubishi	975,000*
Chrysler Corp.	967,000

* Estimates.

Source: Automotive News

The oil price shock of 1979-80 raised prices per barrel from around $13 in 1978 to $38 in 1980, from which they fell back to $28 to $29 in 1983. However the strength of the dollar in 1981-83 prevented this fall being passed on to the European countries. While the dollar price of oil fell 25 per cent over the period, the European price rose 30 per cent. Recent weakness of the dollar should reduce this differential.

Japan's continued growth in motor output, overtaking U.S. production, has been matched step by step with growth in exports, which have grown nearly 200 per cent in 10 years. Exports to Europe have risen from 100,000 cars in 1970 to nearly 1m by 1983, while in Europe the level of exports has remained stagnant. European exports to the U.S. (their main market in the early 1970s) have halved since then as Japan's exports to the U.S. have grown dramatically to account for almost 50 per cent of total exports.

The continued pressures on European manufacturers are reflected in statistics which show European registrations moving ahead of production for the first time in 1980-81.

Among the developing countries, South Korea is strengthening its position, with production growing at around 30 per cent a year, although from a small production base of about 100,000 units in 1982.

Japan's labour costs remain competitive in dollar terms against its European competitors, although these costs are four times the comparable costs in South Korea.

Among the major car producing industrialised countries, Japan and West Germany had the lowest rate of increase in labour costs over the 1975-82 period, but the strength of the yen against the European currencies wiped out that advantage.

On the international stock markets, the shares of the leading car producers, particularly those based in the U.S., improved in 1983 with a better overall performance than the markets as a whole. As measured by the Capital International indices, the share price of car producers rose 30 per cent in 1983 against overall stock market growth of 18 per cent.

Commentary by Our Economics Staff; data analysis by Financial Times Statistics Unit; charts and graphs by Financial Times Charts Department.

PRODUCTION AND CARS IN USE

Millions of cars	Cars in use	Production	Production ÷ use
USA	124.8	6.5	5.2
EEC	91.0	9.2	10.1

* Average of 1976/82.

PROFITABILITY: Net Profit (after tax)

	1977	1978	1979	1980	1981	1982
U.S.: BIG 3 (US$m) (excluding contribution from Ford and GM in Europe)	3,852	3,245	1,408	−4,243	−1,066	1,334
All European companies £m	1,362	1,723	1,328	−588	−846	−271

Source: Company Results

Effective Exchange Rate

	US	JAPAN	GERMANY	FRANCE	UK
1975	100.00	100.00	100.00	100.00	100.00
1976	105.19	104.21	104.84	95.83	85.60
1977	104.70	115.21	113.00	91.31	81.17
1978	95.73	141.67	120.11	91.22	81.46
1979	93.85	131.48	127.45	93.38	87.24
1980	93.88	125.59	126.75	94.35	96.05
1981	105.69	142.94	119.26	84.27	94.91
1982	118.05	134.78	124.28	78.65	90.46
1983	124.86	148.42	127.18	70.01	83.22

Car Production (000's)

	1971	1979	1982	1983*
US	8,508	8,419	6,050	6,460
Japan	3,720	6,180	6,888	7,094
UK	1,740	1,070	888	1,045
W. Germany	3,696	3,936	3,766	3,840
France	2,698	3,732	3,088	3,215
Spain	460	973	924	1,132
S. Korea	12	112	98	130

* Estimated.

Hourly Compensation Costs*

Production workers in motor vehicles index

	US	W Germany	Japan	France	UK
1975	100	100	100	100	100
1976	115	114	118	111	100
1977	127	136	141	121	103
1978	128	153	191	134	118
1979	136	172	188	154	146
1980	160	189	186	183	185
1981	203	186	229	188	199
1982	256	211	254	202	201

* Adjusted for changes in export competitiveness.

GNP/GDP % growth

	US	Japan	OECD-Europe
1975	−1.2	2.3	−0.9
1976	5.4	5.3	4.6
1977	5.5	5.3	2.4
1978	5.0	5.0	3.0
1979	2.8	5.1	3.3
1980	−0.3	4.8	1.3
1981	2.6	4.0	−0.1
1982	−1.9	3.2	0.6
1983	3.3	3.0	1.0
1984	4.7	4.2	1.5

Source: OECD

Industrial Production

% change

	US	Japan	OECD-Europe
1975	−8.9	−10.5	−6.9
1976	10.7	10.9	6.9
1977	5.9	4.2	2.8
1978	5.8	6.1	2.1
1979	4.4	7.2	4.8
1980	−3.6	4.6	0.3
1981	2.6	1.1	−1.9
1982	−8.2	0.4	−1.5
1983	6.5	2.2	0.1

Source: OECD

Car Production

% change

	US	Japan	W Ger.	UK	France	S Korea
1975	−9.6	16.2	2.1	−17.2	−3.2	*
1976	26.7	10.0	22.3	4.8	14.6	*
1977	8.3	7.8	8.8	−1.0	5.3	*
1978	−0.4	10.2	2.8	−7.1	1.7	*
1979	−8.2	3.4	1.0	−12.8	3.0	*
1980	−24.0	13.9	−10.8	−13.7	−8.8	*
1981	−2.5	−1.0	2.2	3.4	−15.4	*
1982	−19.0	−1.3	4.9	−7.0	4.5	36
1983	27.8	3.0	2.0	17.6	4.2	33

* Numbers too small for meaningful percentages.

Exports of Cars (000's)

	FRANCE	W GERMANY	ITALY	UK	JAPAN
1971	1,149	2,156	640	721	1,299
1972	1,240	2,098	659	627	1,407
1973	1,340	2,203	656	599	1,450
1974	1,298	1,882	686	565	1,727
1975	1,233	1,500	661	516	1,827
1976	1,326	1,995	696	496	2,539
1977	1,429	2,201	644	474	2,959
1978	1,394	2,210	640	466	3,042
1979	1,535	2,283	647	410	3,102
1980	1,359	2,108	511	359	3,947
1981	1,244	2,197	425	349	3,946
1982	1,194	2,517	437	313	3,770

TECHNOLOGY

EDITED BY ALAN CANE

INFORMATION EQUIPMENT

'Bizarre' standards confusion

BY GEOFFREY CHARLISH

THE STANDARDS disarray that exists between official bodies, non-official groupings and manufacturers is causing increasing irritation and frustration among users of information equipment from different makers.

So much so that one of the delegates at the recent Info 84 conference in London described the present situation as "bizarre."

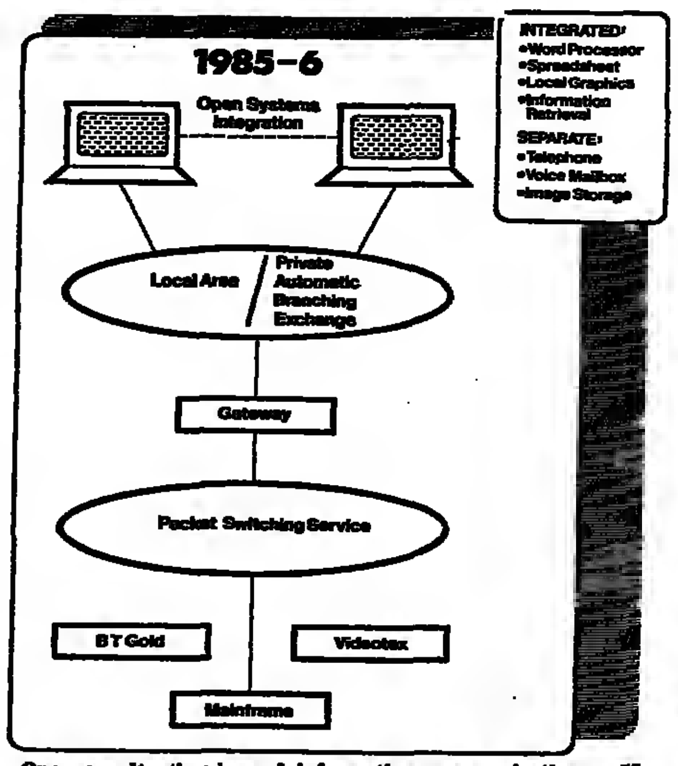
And he is not too far wide of the mark. The present position is that if someone with a screen and keyboard device (personal computer, word processor, terminal) wants to transmit text, computer data or anything else to another, dissimilar terminal on-site, let alone within the UK or overseas, then the chances are minimal.

Unfortunately such communications are technically difficult, as any attempt to grasp the complexities of the "ISO seven-layer model" will reveal. ISO, the International Standards Organisation, is attempting to arrive at a set of standards covering all the aspects of "open systems interconnection," or OSI, from communications systems right down to how documents are arranged. This will allow communications between different equipment makes.

In so doing however, it has to embrace some functions that another body, CCITT (the international consultative committee for telecommunications) sees as its own. Traditionally, the CCITT has looked after public communications resources while ISO has covered user equipment. But in recent years computers have taken to communicating while communications equipment has become computer driven. As one speaker at Info 84, Peter Rigg of Logica said: "It is a grey area."

He continued: "The development of joint standards is stimulated by a widespread desire to achieve them, but hindered by sectional interests and the procedural rules of CCITT and ISO, which make truly joint meetings and joint decisions impossible. What commonality there is is achieved by informal rather than formal collaboration."

Other formal efforts run in parallel, such as at the Institute of Electrical and Electronic Engineers in the U.S. where the work is mainly concerned with what ISO calls "transport mechanisms"—local area networks (LAN) and more recently metropolitan area networks (MAN) that cover a 25 mile radius over cable TV links. These link computers and terminals on a single ring-like cable.



One consultant's view of information communications. Mr Peter Rigg of Logica thinks that dedicated word processors and teletex terminals will vanish

In Europe, ECMA (European Computer Manufacturers' Association) came forward with LAN proposals in 1982, and was backed by 20 companies led by ICL. This "standard" (it does not have the authority and recognition accorded to ISO or CCITT) has some commonality with both ISO and Ethernet. Ethernet largely follows the IEEE rules.

As usual, IBM waited for some of the LAN dust to settle and then announced its own experimental version last summer. IBM's preference for token-passing technology is based officially on a desire to support a wide mix of applications, including voice, for which the other main sort of LAN, called CSMA/CD is less suitable.

However, according to Peter Rigg, the unofficial reason is that IBM does not want Xerox to take over the whole market with its CSMA-based Ethernet system. He also commented that although both the Xerox and IBM LANs are said to be "open," (that is, will allow any make of equipment to be connected), Xerox can prove it, while "IBM has a credibility gap at the moment."

These kinds of differences abound. Another example is in "mail-box' store and forward electronic mail offerings; none of these currently work together, since there is no common protocol or message structure.

Meanwhile, the UK Department of Industry, sensing frustration at both user and manufacturer level, has instituted Intercept.

This is a strategy which aims to identify and promote emerging standards without waiting for their formal publication. The planned confidence level behind these "intercepts" will be that they should all mature ino full standards. They should never be withdrawn or fulfil only temporary functions.

The problem remains however: which will mature? While users wait for the official European standards, manufacturers are bound to seek to do as much business with their own products as possible. IBM with its massive installed base of terminals is the obvious example.

IBM is known to have developed a new set of architectures to deal with document transfer within its own product range. These are DIA, standing for document interchange architecture, and DCA, document content architecture; they are higher level protocols over and ebove SNA (systems network architecture, the company's established communications method).

At the conference it became clear that AES, the word processing company, is backing the IBM approach, for reasons made plain enough by Michael Burke, product planning manager in Montreal. He said: "It is understood that these architectures are destined to become defacto standards within the industry in a relatively short time."

In the other camp—that of the telephone companies—the growing stature of the private automatic branding exchange as the means of switching data (there were presentations from both Plessey and GEC) is partly because it is in a rather more advanced standards position than the LAN, having grown over 50 years rather than five. However, Rigg pointed out that it has "no efficient standard method for linking to computer host systems and no international standard is being developed."

Burke of AES appeared to have little time for ISO, CCITT, ECMA or any of the "official" European approaches. He said: "Standards are standards only when people use them."

It is difficult to argue with that.

CAR COMPONENTS

How Van Doorne stepped up a gear

BY WALTER ELLIS IN AMSTERDAM

IT IS NOT often that a small, specialist manufacturer wins contracts to supply some of the world's largest companies. Breaking in to the big league is the dream of all entrepreneurs.

It helps, of course, if you have a good product, and it is also handy to be part-owned by a duo of industrial giants. Van Doorne Transmissie, a Dutch gearbox manufacturer, is one such company. Its workforce of less than 200, based in the southern city of Tilburg, close to the Belgian border, has just had its future secured—and the likelihood of success confirmed— by orders from Ford of the U.S. and Fiat of Italy for its revolutionary CVT transmission system. The company was once part of DAF cars.

Fuji and Nissan of Japan, Opel (part of General Motors) and Volvo are also among the interested parties. Van Doorne itself predicts a brilliant future for its latest device, while no less a motor magnate than Henry Ford II expects all Ford cars to offer CVTs as optional equipment within the foreseeable future.

The CVT, standing for continuously variable transmission, dispenses with fixed ratios in automatic gearing, allowing a smooth and gradual transition and permitting fuel savings of up to 20 per cent on present costs. Reliability is another advantage, with fewer parts, all of them working together, with little inter-gear resistance, the CVT is both sophisticated and simple.

Present-day automatic gear systems still operate on the principle of abrupt movement from one gear-ratio to the next. This movement even gave rise to the American definition of a transmission system as a "shift." With the CVT, the process is uninterrupted by fixed stages—ie, 1st, 2nd, 3rd and 4th gears.

Instead, two pulleys, one attached to the engine, the other to the drive-shaft, are capable of width-wise expansion and contraction. Each pulley, shaped like an old-fashioned cotton reel, has a dip in the middle, which deepens or raises as the sides of the pulley either move apart or close up. As one pulley deepens, the other becomes more shallow, and a belt drawn between the two transmits the changes in speed and ratios thus achieved on a continuous basis.

The CVT has been around in one form or another for nearly 25 years. The struggle for perfection has been long and arduous, and at one point, when the system was used by Daf Cars with belts made of rubber rather than steel, the humiliating suggestion was that the vehicles were powered by elastic bands. Co-operation with Fiat and Ford, among others, in recent years has helped smooth out the wrinkles, so that the latest, 811 CVT has won paeons of praise from the auto-industry round the world.

Fuji is to be the pioneer in Japan. GM is to manufacture under licence in Strasbourg. Volvo Car, the independent Dutch associate of Volvo of Sweden, is to make CVTs in Belgium for Fiat and Ford. Ford Fiestas, followed by Escorts, will start the process, alongside the Fiat Uno and the Subaru Justy. Some cars fitted with the CVT could even be on the streets this summer.

Van Doorne Transmissie, until 1979 a direct descendant of Daf cars (the others are Volvo Car and Daf Trucks), is now owned jointly by the Dutch state, Volvo Car, Borg-Warner of the U.S. and Fiat. Volvo holds 39.5 per cent of the shares, Fiat and Borg Warner 24 per cent and the state 12.5 per cent.

The founding Van Doorne family has gradually moved out of the picture, and the present, complicated pattern of holdings was completed last year when Volvo Car (itself 70 per cent state-owned) became a major partner at a cost of only Fl 23m. Van Doorne faced an investment crisis. It needed cash urgently if the CVT was really to take off, and the involvement of active outsiders seems at last to have done the trick.

Van Doorne does not expect to be a major supplier of completed Cvts. Volvo Car will make up to 50,000 units a year for the next two years under the terms of a new contract, while Ford is expected to go into production itself at a later stage.

GM is investing U.S.$180m in its plant in Strasbourg, and the Japanese will also make their own. But the Dutch company will still supply parts

Computer

Linkword teaching system spreads

Dr Michael Gruneberg's Linkword system for languages is now available on a total of eight different microcomputers including the BBC Micro, Spectrum, Sirius, Apricot, Apple, IBM machines and from Tansoft for the Oric Atmos.

At the moment only four language teaching courses are available but Dr Gruneberg has plans for others including Russian, Greek and Hebrew.

The principle behind Linkword is the use of phrases which link English with the equivalent foreign word. For example, the Spanish for lobster is hummer so the computer asks the student to imagine a lobster with a sensor of humour.

Graphics are not used, partly because of lack of memory in most home computers but also because some students learn better by using their imagination to create mental images rather than receiving fixed images from the computer. Dr Gruneberg admitted that this might work to the detriment of others who cannot imagine images so well.

Dr Gruneberg, who is a psychologist and lectures at Swansea University, decided to develop Linkword as he finds languages uninteresting and thought it would be a challenge.

Electronics

Gallium crystals

SUMITOMO ELECTRIC has developed the world's first dislocation free gallium arsenide single crystal for use in integrated circuit chips, a company spokesman said.

The company plans to market it in a year. Gallium arsenide uses less power than silicon and operates at higher speeds but the compound has previously been difficult to use because of partial dislocation in the configuration of gallium and arsenic atoms.

Materials

Tougher plastics developed

DU PONT said it had developed a new tough grade of plastic to be used in auto parts, crash helmets, appliances and other products.

It said the new compound called Rynite SST would be used instead of metal in products that needed stiffness and resistance to impact and heat.

Du Pont said it will make the plastic first in the U.S. and later in Europe and Japan. The compound is part of its engineering plastics business which has been growing faster than any other part of its polymer products businesses.

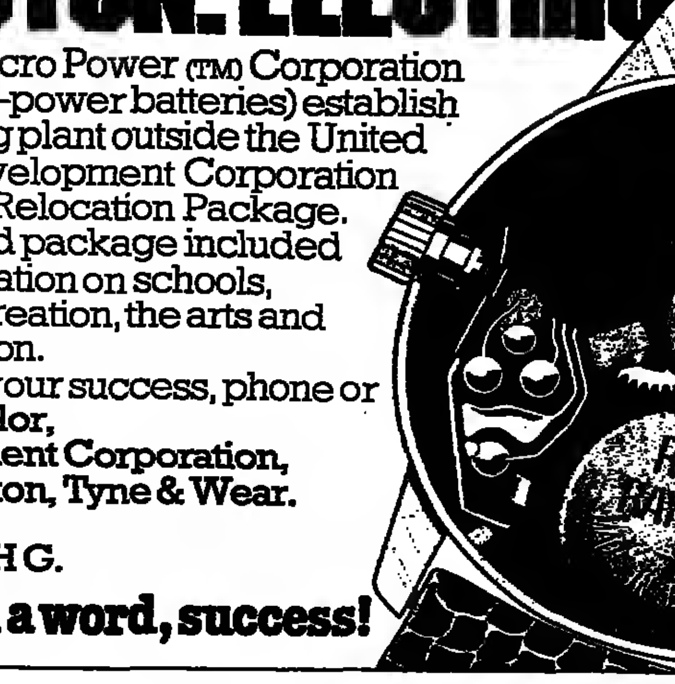
Software

Foreign language database

COMPSOFT, based near Guildford in Surrey, has developed a data base program which can be used in several European languages including Finnish, French, German, Swedish, Italian, Spanish and Welsh.

The data base can run on most 16-bit microcomputers which use the MS-DOS operating system. Called Delta, the program has all the messages separated from the main part of the data base allowing easy translation.

Several large computer makers including Hewlett-Packard, Digital Equipment Corporation and Xerox now distribute the system. More details from Compsoft on 0483 898545.



WEEK'S FINANCIAL DIARY

The following is a record of the principal business and financial engagements during the week. The board meetings are mainly for the purpose of considering dividends and official indications are not always available whether dividends concerned are interims or finals. The sub-divisions shown below are based mainly on last year's timetable.

TODAY

COMPANY MEETINGS—

BOARD MEETINGS—

DIVIDEND & INTEREST PAYMENTS—

TOMORROW

WEDNESDAY MARCH 7

THURSDAY MARCH 8

FRIDAY MARCH 9

SATURDAY MARCH 10

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UK NEWS

Max Wilkinson reports on how the Chancellor could change import procedures

Lawson may revise VAT system

AS THE long queues of lorries slowly unwound in the mountainous border regions of Western Europe after the end of the French drivers' protest, the British Treasury watched with special interest.

The dispute about slow customs clearance procedures has a direct relevance to an option that Mr Nigel Lawson, the Chancellor of the Exchequer, is considering for inclusion in his budget on March 13.

He has been looking at the possibility of changing the UK system for levying value-added tax on imports to make it conform with procedures in all other European countries.

In Britain, importers are allowed a period of delay between the landing of goods, when VAT is due, and the actual payment, made with their next quarterly VAT return to the Customs and Excise department.

The period of grace between the physical import of goods and the payment of VAT varies widely, but the average is thought to be about six weeks. That might be considered by some as an interest-free loan from the Treasury.

On the European continent, however, VAT must be paid as the goods pass through customs points. Although rules vary between different countries, lorry drivers have to deal with complicated paperwork and are often subject to tedious delays while goods are checked.

IMPORTS TO UK
(£bn on overseas trade basis)

	1982	1983	% change
Total goods	56.9	66.1	16
Non-manufactured goods	18.6	19.7	6
Semi-manufactured goods	14.0	17.0	21
Finished manufactured goods	23.0	28.0	22

Figures are higher than those on balance-of-payments basis, which exclude transport and other costs. Total of goods includes some "miscellaneous" imports.

The obvious advantage of the continental system from the Treasury's point of view is that it would accelerate payments on Britain's imports (£86bo last year) and give a once-for-all boost to the Government's financial position.

The effect would be to reduce the public-sector borrowing requirement in 1984-85 by between £500m and £1.5bn, depending on whether a change of rules were applied to all imports or to some categories like manufactured goods only.

That might give the Chancellor some much-needed room in his budget to improve the incentives for saving, or to ease the tax burden at some of the points where it is bearing heavily.

An additional argument which officials have deployed in favour of the change is that it would discriminate against importers without being overtly protectionist.

Last year, Britain's imports of goods rose by 7 per cent in volume terms while imports of manufactured goods surged by over 20 per cent in value terms.

Against these arguments, the Chancellor has to balance two sets of objections.

● The first is the mass of practical difficulties associated with collecting VAT at the point of entry. Those difficulties have been dramatically highlighted by the continental lorry drivers' dispute.

● The second is that the lorry men's action has greatly increased pressure on European governments to move closer to the present British system of delayed collection of VAT on imported goods.

That militant pressure is reinforced by a more stately recommendation of the European Commission. In July 1982, it said that the Council of Ministers should agree to adopt the British postponed accounting system (PAS).

It might seem perverse for a British Chancellor to choose this moment to move in the opposite direction, especially as the move would load British industry with yet more – and unfamiliar – paperwork.

Several hundred extra customs officers would also be required to deal with the new VAT forms and to check that cargoes corresponded to the documents.

Another reason for the Chancellor to hesitate might be to allow more time to consult with industry about the advantages of applying the change to some categories of imports only.

For example, an importer of a foreign car might find the point of entry procedure less onerous than a British-based manufacturer using a lot of imported components. The complete car would be subject to only one bout of form-filling.

On the other hand, a manufacturer using many imported components would have to go through the procedure multiplied many times with possibilities of delay on each occasion.

It might be seen as fairer to accelerate VAT payments for finished manufactured goods only, even though that would reduce the financial benefit to the Treasury.

Despite all these difficulties, the Chancellor must be greatly tempted by the idea. The 25 per cent increase in company profits this year and companies' greatly improved liquidity would in general allow them to make the accelerated payments without obvious strain on their cash resources.

£115m order likely to help sale of Shorts

BY OUR BELFAST CORRESPONDENT

A HUGE U.S. government order for Short Brothers, the state-owned Belfast aircraft manufacturer, is likely to help the company on its way back to private ownership.

Initially worth £115m, the contract to supply Sherpa freight aircraft to the U.S. Air Force might reach a total value of £460m if options for more aircraft are taken up.

Sir Philip Foreman, chairman and managing director of Shorts, was overjoyed. The order was won after 18 months' struggling against more experienced competitors.

"Other countries, particularly in the Far East, could follow the American lead," Sir Philip said.

Shorts will build 18 Sherpas, the freight version of its high-selling twin turboprop 330 commuter airliner, to be used to ferry spares between USAF bases in Europe. The options cover another 48 aircraft and can be exercised over the next two to four years.

The deal is worth so much because Shorts will also mount an extensive support programme to service and maintain the aircraft. The company's engineers will be permanently stationed in West Germany.

Shorts will quickly add another 600 workers to its 6,000 labour force and the enhanced prospect of further sales will stabilise employment.

Sir Philip said that after many years of losses, the company would break even in the current financial year and the American order, the biggest in the company's history, would help its return to profitability in 1984-85.

"A return to private ownership would be healthy but there is no point thinking about it until we have at least two years of good profits in the bag, and, more importantly, can project sustained profits," he said.

For several years the company, with government support, has invested at the rate of £20m to £25m annually in new technology and capital equipment to make its Belfast complex one of the most modern aerospace facilities in Europe.

Shorts was restructured in 1967 into three divisions. It manufactures a range of regional commuter and freight aircraft, produces guided weapons such as the Blowpipe and Seacat, and makes main components, including jet engine pods, for other aircraft companies.

The USAF order has cemented the success of the aircraft division. More good news is expected this week, in the shape of a batch of orders for the 36-seat Shorts 360 aircraft, some of them for British Midland Airways, and its subsidiary, Loganair and Manx Airlines.

Sir Philip said he be now wanted to build up the components side of the business again after difficult times caused by the recession in the big-jet market. That led to a rescheduling of work for Boeing and Rolls-Royce, and it meant redundancies in Belfast.

He is hunting for a new contract and left today for Seattle for discussions with Boeing.

Sharp drop in union donations to Labour

By Philip Bassett, Labour Correspondent

LABOUR PARTY finances, already in danger from the effects of the Government's Trade Union Bill, face a new threat from a sharp drop for the first time in recent years in trade union members' political contributions, according to official figures to be published next month.

The figures, which have already been sent to Mr Tom King, the Employment Secretary, will cause dismay in the Labour Party and the unions. About 80 per cent of the party's income comes from the unions.

Labour's finances are likely to suffer because of the Bill, which is due to become law in the summer. Its provision of 10-yearly membership ballots on the continuation of trade unions' political funds is felt by many in the party and the unions to be likely to lead to a cut in the unions' financial support for Labour.

One authoritative estimate is that this and other measures could cut up to £2m from Labour's income, which stood at £3.59m in 1982, the latest year for which figures are available.

However, in advance of these expected difficulties, new figures in the annual report of the Government's Certification Officer, Mr Alan Burridge, expected to be published next month, will show the financial support for Labour among union members to be declining.

The total figures for all 63 unions with political funds at the end of 1982 show that 77 per cent of trade union members now pay the political levy, compared with an annual figure of 81-82 per cent over the previous five years.

They show that 6.49m trade union members – out of a possible total of 8.43m in unions with political funds – now pay the political levy, compared with 7.17m levy payers out of a possible 8.9m in 1981.

The number of unions with political funds is also down by more than 7 per cent.

The report will show a decline of about 5.6 per cent in political funds income overall, from some £6m in 1981 to £5.6m the following year.

Grant aid for high technology set to be cut

BY JOHN LLOYD, INDUSTRIAL EDITOR

THE GOVERNMENT is expected shortly to cut the grants it pays to promote high-technology industries – the sector pinpointed by industry ministers as crucial to the UK's economic health.

Funds allocated for support of advanced production processes and techniques have been snapped up much more quickly than had been planned, and most programmes are likely to run out of their allocated funds long before the given time periods.

It is now almost certain that the Support For Innovation (SFI) schemes, which give a maximum of 33.3 per cent grant to projects which prove they would not go ahead without government assistance, will be cut back soon to a level of 25 per cent, or possibly less. The grants were raised from 25 per cent to 33.3 per cent last year for an indefinite period.

It is expected that the cuts may be announced in the March 13 budget or in a separate announcement soon afterwards.

Officials believe they may be able to save some cash from funds earmarked for regional development grants, but not taken up, in the coming year.

The rapid take-up of the SFI programmes money, though alarming in one sense, is also seen as proving that there is considerable activity in the leading-edge fields. It is also argued that this level of activity shows that government aid need not be pitched so high.

One of the oldest of the SFI schemes, the Microelectronics Industry Support Programme, has now exhausted the £55m allocated to it in 1978. Its companion programme, the Microelectronic Applications Project which received a total of £85m to fund it to 1985, now has less than £20m left.

The Industrial Robots scheme, funded with £10m 18 months ago, is now considerably overspent. Its companion programme, the Flexible Manufacturing Systems scheme – which received £35m over four years at the same time – has already spent some half of that.

Investments overseas estimated at £44bn

BY CHARLES BATCHELOR

UK COMPANIES had net direct investments overseas worth £44bn at book value at the end of 1981. This figure compares with investment by overseas companies in the UK of nearly £29bn, according to figures just released by the Department of Trade and Industry.

The department's statistics include for the first time data for insurance companies time and cover all direct investments by UK companies.

More than four fifths of UK direct investment overseas was in the developed countries, half of which was in North America. Just under one fifth was in the EEC.

The U.S. was by far the most important single country, accounting for a third of UK direct investment overseas. Less than one fifth of investment abroad was in the developing countries.

Manufacturing accounted for 37 per cent of the book value of outward direct investment, while distribution accounted for 28 per cent, oil for 20 per cent and banking and insurance for the remainder.

Virtually all foreign investment in the UK was from the developing countries. The U.S. accounted for 57 per cent of the total with holdings of £16.4bn.

Just under a quarter of inward direct investment was held by EEC companies.

In terms of sectors, manufacturing accounted for almost half of the total book value of inward direct investment. More than half of North American inward investment, but less than a quarter of EEC holdings, was in manufacturing.

Rolls to develop engine for fighters

By Michael Donne, Aerospace Correspondent

ROLLS-ROYCE has begun to develop as a private venture a new engine for future fighter aircraft, called the XG-40. It is designed for the new generation of light combat aircraft expected to enter service in the 1990s.

The venture is in parallel to work under way by Snecma, the French aero-engine manufacturer, on an engine called M-88 which is designed to power the French Dassault-Breguet Avion de Combat Experimental (ACX).

The Rolls-Royce power-plant is called a "demonstrator" because it aims to prove the basic concept of the new engine before it is put into quantity production, or instead it will be used as a stepping stone to further developments.

It is aimed at powering the proposed Future European Fighter Aircraft (Fefa) of the 1990s. This is a plan for a European collaborative fighter aircraft for the mid-1990s, between the UK, France, Italy, Spain and West Germany.

As a preliminary development, the UK – through a group of companies headed by British Aerospace and supported partly by the Government – is developing the Experimental Aircraft Programme (EAP) for a first flight in 1986.

This is, in turn, designed to lead into either an all-British Agile Combat Aircraft (ACA) for the 1990s or the European collaborative Fefa.

The EAP itself is costing £200m, of which the Government is providing about £85m and the companies the remainder.

Initially, the EAP is expected to use a derivative of the RB-199 engine which powers the Tornado fighter. But Rolls-Royce believes that an all-British technology demonstrator engine is also desirable, and the XG-40 is the result.

Work on the XG-40 is at its earliest stages. The first demonstrator model is not expected to run on the test-bed until 1986. The engine will embody much advanced technology in new materials, turbine blade design and other areas.

● Mr Norman Tebbit, Secretary for Trade, inaugurated on Friday a £10m test rig at Rolls-Royce's Derby factory, where civil aero-engines are built.

UK NEWS

Textile production shows 16% rise

BY MAURICE SAMUELSON

THE UK textile industry yesterday provided fresh evidence that it is beginning to recover after years of import penetration.

The British Man-made Fibres Federation said that UK production and deliveries in 1983 regained most of the ground lost in the previous year.

Production rose 16 per cent (to nearly 300,000 tonnes) with deliveries rising 17 per cent (to 305,000 tonnes).

Total employment in the artificial fibres industry was 10,120 at the middle of the year, 10 per cent less than in June 1982 and less than half the June 1980 level. A fractional increase at the end of last year suggested that the long-term contraction of the workforce had stopped.

For staple fibre (as distinct from filament yarn), production and deliveries were the highest for two years, with exports accounting for 56 per cent of total deliveries.

The industry's improvement is partly a result of the weaker pound, which has helped to cut imports. Manufacturers say they are also reaping the benefits of the past four years' rationalisation and re-equipment.

In the industry as a whole, output per worker is said to have risen by about 25 per cent since 1980.

Budget likely to keep inflation fight as priority

BY MAX WILKINSON, ECONOMICS CORRESPONDENT

THE UK BUDGET on March 13 is likely to have a tough anti-inflationary edge and a series of measures intended to encourage savings and investment.

Mr Nigel Lawson, the Chancellor of the Exchequer, may tighten slightly his borrowing target compared with that implied in the medium-term financial strategy.

This suggested a public sector borrowing requirement of 2¼ per cent of national income which will probably come to about £8¼bn in 1984-85 on the Treasury projections.

An improvement, however, in the outlook for the economy – and for government revenues – since the autumn will allow Mr Lawson to announce a lower target without raising taxes, probably of £7½bn. Overall, he is planning tax increases to balance concessions, in spite of his increased room for manoeuvre.

The Chancellor is also likely to emphasise the priority of the fight against inflation by announcing new figures for the medium-term financial strategy showing inflation coming down to about 3 per cent by 1987. He may extend the timescale to show a continued reduction in government borrowing.

The most widely expected of the measures to help individual savers is a reduction or abolition of the 2 per cent stamp duty on share transactions. Total abolition would cost £300m to £400m in a full year, but it would have the double advantage of helping personal investors and making the London Stock Exchange more competitive internationally.

Mr Lawson has also been looking at other possible measures, including abolition of the investment income surcharge, by which unearned income of more than £7,100 is taxed at a higher rate than earned income.

The Chancellor has also been looking carefully at ways of easing the impact of capital gains and capital transfer taxes.

These measures to help savers are likely to be broadly offset by removal of some of the tax privileges of savings institutions. Building societies, which lend money for house purchases, have been told that capital gains on their dealings in government securities are to be taxed as income, instead of being treated as tax-free capital gains.

Banks have also been told that they will have to deduct tax from interest paid on deposit accounts, instead of leaving the customers to declare the interest. These two measures could yield the Treasury some £200m in a full year.

There are strong indications that Mr Lawson may reduce or remove the 15 per cent tax relief on life assurance premiums, with a total possible saving of about £500m a year.

The Chancellor would like to continue the shift from direct to indirect taxation. His priority for cutting indirect taxation would be to raise personal income tax allowances by more than the 5 per cent rate of inflation.

He could raise allowances and thresholds by 3 per cent more than the inflation rate at an extra cost of about £600m in a full year.

To find such a sum, he would need to increase indirect taxes. One possibility, which he has been carefully considering, would be to accelerate the payment of value-added tax on imports. This could raise about £1.5m next year

Big rise in car output expected by Lotus

By Kenneth Gooding, Motor Industry Correspondent

LOTUS, the sports car manufacturer founded by the late Colin Chapman and based in Norfolk, expects to produce 900 cars this year. Mr Mike Kimberley, the managing director, says it will be a 40 per cent improvement on the 642 cars made last year.

He expects about 250 to go for sale in the U.S., compared with the 180 sold there in 1983.

Mr Kimberley maintains that Lotus's financial difficulties at the beginning of last year prevented the company from increasing output at a time when it was re-entering the U.S. market.

As a result, the 180 cars were switched from the UK market and the company's sales in Britain dropped from 410 to 383, when the total registrations rose by 15 per cent.

Lotus's finances were put back on an even keel last August by a £6.69m rescue operation which resulted in British Car Auctions taking a 26 per cent stake in the sports car company. Toyota, Japan's largest motor group, took another 17 per cent.

Mr Kimberley says that Lotus is strengthening its UK dealer network. Several new dealers – some associated with Austin Rover – are shortly to be appointed to replace others who have left the network.

In the U.S., Lotus has appointed 24 dealers, and ultimately wants 50 there.

Lotus is involved in engineering projects for 16 another companies, mostly in the car industry, and the engineering business is growing at 20 per cent a year, according to Mr Kimberley.

Banks may set aside £1bn for bad debts

BY DAVID LASCELLES

THE UK'S Big Four clearing banks will probably have to set aside more than £1bn of their 1983 profits to cover bad debts in the UK and abroad. But their annual results – due this week – will still show solid increases because of the strength of their loan business.

The exception is Midland Bank, the third largest, which has said that property loan problems at Crocker National Bank, its U.S. subsidiary, will wipe about £75m off 1983 earnings.

Lloyds Bank, the smallest, is expected to come out on top with a profits rise of about 25 per cent from last year's £323m. Lloyds, which has the biggest exposure of the clearers in Latin America, swallowed a good part of its bad debts in 1982, so it entered 1983 with a cleaner balance sheet than the others.

Barclays Bank and National Westminster, numbers one and two, will probably show profit increases of about 15 per cent on the £495m and £439m they earned in 1982. Midland's results will be down by a similar amount from £251m.

According to Mr Keith Brown, bank stock analyst at stockbrokers Greenwell, the factors boosting bank profits were the strength of personal loan demand in the UK, a rise in fees and commissions – banks raised their charges in 1983 – and the fruits of the industry's cost-paring drive.

He expects the Big Four's profits to total about £1.7bn, up about 13 per cent on 1982.

But provisions for bad debts will be huge because of the Third World loan crisis and the high rate of bankruptcies in the UK.

Mr Keith Reynolds of De Zoete and Bevan predicts the banks will set aside a record £1.25bn to cover bad debts, up 30 per cent from £962m in 1982. Of this, £679m will be used to cover bad debts abroad which, Mr Reynolds says, total more than the banks' profits from their international operations.

This figure includes Midland's £75m Crocker provision. Even without it, however, the total would be higher than the 1982 figure of £522m.

Barclays will show the scars of business loan losses in Mexico and the U.S., as well as bad debts in its California retail business. NatWest has the smallest overseas exposure of the clearers, but loan losses will still show an increase.

The question banging over Midland is whether its provisions are sufficient to clean up the Crocker problem. If they are, then it should be able to share in the upswing in bank profits forecast for this year, on the strength of loan demand and the low level of inflation.

Government faces ports row

BY BRIAN GROOM

THE GOVERNMENT is heading for a row with the ports industry and other trade interests over an official report which calls for cuts in customs facilities and an increase in charges levied oo traders by the Customs and Excise for providing the service.

The report on customs attendance was carried out by Sir Derek Rayner in 1981 as part of his brief to cut Civil Service costs. It was released for consultation only last December, after a long battle in cabioet betweeo the Treasury and other departmeots.

The British Ports Associatioo believes the report is "misconceived and misguided" and is calling for its withdrawal. It argues that the recommendations would disrupt free competition among British ports, and damage their international competitiveness.

The association wants all charges for providing customs services removed as part of o wider effort to cut the cost of using British ports, which is generally higher than oo the Continent. It also wants the cost of pilotage and lighthouse services – provided by independeot outhorities – reduced.

Other groups like shipowners are also concerned about these costs. The shipping industry pays the bill for pilotage (£43.5m in 1982) and lights (forecast at £46m for 1983 to 1984).

The Rayner report says Britain has too many ports and wharves. It calls for regular customs services to be withdrawn "in some cases where the volume of traffic is so low that it is grossly unecooomical to provide attendance."

Its recommendations include: withdrawing passenger facilities if inward traffic falls below 30,000 a year; approving no new passenger facilities unless there is overriding national need; limiting hours of operation for passenger services; influencing the timing of arrivals and departures to avoid peaks aod troughs; and not approving new ferry facilities unless there are no suitable existing ones.

The report also recommends that regular customs facilities at some of Britain's 35 internatiooal airports – those which have only occasional foreign flights – be withdrawn.

Lost drug sales 'cost £100m'

By Lisa Wood

THE BRITISH pharmaceuticals industry claims to be losing about £100m-worth of sales a year to companies which buy UK-made drugs cheaply in Europe and bring them back for sale in Britain.

One company, Unichem, a major chemists' wholesaler, claims this so-called "parallel importing" is costing it about £3m a month in lost sales.

Mr Malcolm Town, owner of Maltown, another wholesaler, said the practice of parallel importing did not benefit the taxpayer because a retail chemist, buying cheaper imported drugs had no choice but to claim the agreed price from the National Health Service (NHS).

Mr Town gave tha example of Ventolin, an asthma inhaler, made in the UK by Glaxo Pharmaceuticals and costing the NHS £2.91 per prescription. Maltown re-imports the drug, at £1.45, from France, Belgium and Italy.

A further twist to parallel importing is that of UK parallel importers re-routing drugs priced for other English-speaking markets into the UK. Adalat, a drug for treating hypertension, is sold by Mr Town at about half the price that the West German company, Bayer, charges the NHS.

Mr Town buys supplies of the drug from a West German Bayer-supplied wholesaler who has told the manufacturer that he wants the product for a market where the company charges substantially lower prices. The product is then re-routed to the UK.

Bayer declined to comment on Adalat.

The Department of Health and Social Security said the pricing regulatory scheme protected the British pharmaceuticals industry as well as giving the NHS drugs at a reasonable price. The department is investigating the issue of parallel imports and is expected shortly to issue new regulations which could reduce the practice.

Directors stay optimistic

By Our Economics Staff

COMPANY directors cootinue to be optimistic about the prospects for business, according to the latest survey of its members by the Institute of Directors, published today.

Just under 60 per cent of the 200 directors interviewed said they were more optimistic about business prospects than they were six month ago.

This result is similar to the findings from the two previous surveys in the series, which was launched in October.

The directors appear to have become slightly more optimistic about the trend of profits, with a balance of 47 per cent reporting that they were better during the last six months than in the same period last year. This compares with a balance of 30 per cent in the October survey.

WORLD CAR MARKETS

UK CAR REGISTRATIONS	1982	%	1983	%
Total market	1,791,699	100.00	1,555,027	100.00
Total UK produced	771,950	43.08	657,533	42.28
Total imports	1,019,749	56.92	897,494	57.72
Ford	518,048	28.91	474,192	30.49
BL	332,725	18.57	277,260	17.83
General Motors (Vauxhall-Opel)	262,141	14.63	181,737	11.69
Peugeot Group				
Peugeot	21,342	1.19	19,636	1.26
Talbot	58,183	3.24	56,147	3.60
Citroen	25,751	1.44	24,149	1.55
Total Peugeot	105,276	5.87	99,932	6.41
Nissan	104,684	5.84	93,213	5.99
Volkswagen-Audi	100,727	5.62	92,435	5.94
Renault	62,923	3.51	64,147	4.13
Volvo	61,250	3.42	51,707	3.33
Fiat-Lancia	49,715	2.77	48,808	3.14

Source: Society of Motor Manufacturers and Traders

UNITED STATES	1982	%	1983	%
Domestic	6,795,302	74.04	5,756,660	72.15
Imports	2,382,475	25.96	2,221,398	27.85
Total market	9,177,777	100.00	7,978,058	100.00
DOMESTIC				
General Motors	4,053,561	44.16	3,515,660	44.06
Ford	1,571,321	17.12	1,345,498	16.86
Chrysler	841,622	9.17	691,703	8.47
American Motors	193,351	2.10	112,433	1.40
VW of America	85,045	0.93	91,166	1.14
Honda	50,402	0.55	—	—
IMPORTS				
Toyota	555,766	6.05	530,246	6.64
Nissan	521,902	5.68	470,246	5.89
Honda	350,670	3.82	365,865	4.58
Mazda	173,388	1.89	163,638	2.05
Subaru	156,840	1.71	150,335	1.88
VW-Audi	124,954	1.36	113,303	1.42
Mitsubishi	120,450	1.31	93,109	1.17
Volvo	88,857	0.97	72,375	0.92
Mercedes	73,692	9.8	45,963	0.82

WEST GERMANY	1982	%	1983	%
Domestic	1,635,313	75.86	1,835,169	75.62
Imports	520,224	24.14	591,605	24.38
Total market	2,155,537	100.00	2,426,774	100.00
DOMESTIC				
VW group				
Volkswagen	512,623	23.78	529,470	21.81
Audi	125,590	5.82	169,204	6.97
Total VW group	638,213	29.6	698,674	28.78
General Motors (Opel)	390,082	18.09	479,252	19.74
Ford	309,950	14.37	427,866	17.63
Mercedes	233,645	10.83	246,160	10.14
BMW	127,315	5.90	155,683	6.41
IMPORTS				
Fiat	93,284	4.32	101,511	4.18
Peugeot/Citroen/Talbot	86,735	4.02	92,010	3.7
Renault	83,668	3.88	89,316	3.68
Toyo Kogyo (Mazda)	40,573	1.88	58,567	2.41
Toyota	40,037	1.85	56,000	2.30
Nissan	42,490	1.97	46,038	1.89

GM's fortunes rise in Europe

THE WEST EUROPEAN car market bubbled with interest last year. Three factors in particular contributed to a fascinating 1983:

● The hunching of major producers at the top of the sales charts with only 1.4 perceotage points separating Renault at the top from General Motors in sixth position;

● The continued steep rise in the fortunes of GM, the Vauxhall-Opel group, which increased its West European market share from 9.6 per cent to 11.2 per cent;

● The recovery of Japanese sales which went back above 1m, taking Japanese share of the market to a record 10.1 per ceot.

The Japanese performance was fuelled mainly by substantial increases in volume in two major markets: West Germany, the largest in Europe, and the UK, as well as in the Netherlands.

In West Germany the Japanese companies had a combined 20 per cent increase in volume last year compared with 1982. This sent their penetration of the market from 9.8 per cent to 10.4 per cent, only fractionally short of the record 10.6 per cent for 1980.

In Britain, where an unofficial agreement restricting car shipments from Japan has been in existence since 1975, the Japanese last year benefited from the very steep rise in total car sales. The UK car market increased by 15 per cent from the 1982 level to a record 1.79m. Although the Japanese penetration eased slightly, there was a 12.6 per cent improvement in volume in Britain.

The Japanese did even better in the Netherlands, pushing volume up by 20 per cent to nearly 110,000 cars.

For Western Europe as a whole, Japanese car sales rose by 10.6 per cent, from 955,800 to 1,057,654 last year.

The European producers also had to cope with substantial increases in shares won last year by the two U.S. groups, Ford and General Motors.

The race between Ford and Renault for the title of West European car sales champion almost ended in a dead heat. But Renault kept the market leadership it has held since 1980 by a nose with a 12.6 per cent share—only 10,000 registrations seperated the two manufacturers at the end of 1983. This was in a total market which improved by 4.7 per cent from 20m to 10.5m.

Ford's disappointment at being pipped at the post was

By Kenneth Gooding, Motor Industry Correspondent

partly alleviated by the fact that it had its best-ever year in Europe, moving up from 12.3 per cent in 1982 to 12.5 per cent with a 6.1 per cent increase in unit sales. Replacement of the old Taunus/Cortina models by the Sierra had a dramatic impact on Ford's fortunes. Sierra sales totalled 375,440 in Europe last year to give the model a 3.6 per cent share.

Ford's best-selling car, however, was the Escort which, with sales of 442,663 and a share of 4.2 per cent, was beaten ooly by the Volkswagen Golf. The VW model notched up sales of 453,135 and a share of 4.3 per ceot.

Other rankings in the European league table last year were: Fiat 12 per cent of the market (12.3 per cent in 1982) Volkswagen-Audi 11.9 per cent (same) and the Peugeot-Citroen-Talbot group 11.7 per cent (12.3 per cent).

The Spanish-built Corsa/Nova was the key element in GM's 23 per cent improvement in European volume last year. GM sold aboot 190,000 of the small cars which also opened up the important Spanish market to the US group—local producers receive prefereotial treatment for cars they import to Spain.

GM's share of the Spanish car market jumped from 3.2 per cent to 9.8 per cent last year and its sales from 17,180 to 53,845.

Renanlt, Seat the State-owned Spanish group, and Ford all lost ground to GM in Spain. Renault's share was reduced from 32 per cent to 31.1 per ceot; Seat's from 26.1 per cent to 22.7 per cent and Ford's from 15.2 per cent to 13 per cent.

The six major car markets illustrated here accounted for more than 68 per cent of the world's 1983 car sales, estimated to have been about 29.5m.

The slump in sales of cars produced at Volkswagen's U.S. plant cootinued in 1983 but the group still decided to go ahead with the spending necessary to introduce the new Golf there.

In all the other industrialised countries which have their own car production, imports take at least one quarter of total car sales. In Japan, only 1.12 per cent of the market was given up to imports last year.

The struggle between Toyota and Nissan reached a new intensity in the Japanese market place in 1983.

Honda, however, continned its relentless progress and managed to push TK into fourth place—but by fewer than 1,000 registrations.

In Europe the major individual markets were out of step. Compared with 1982, sales in Britain were up by 15 per cent, those in West Germany improved by 12.5 per cent but France and Italy suffered declines; by 2.2 per cent and by 6 per cent respectively.

The Peugeot gronp's fortunes were mixed.

The Peugeot marque was boosted substantially by the introduction of the 205 "supermini." But industrial disputes at the Talbot factory near Paris had a further unsettling effect on that division which in any case was struggling to stop a rapid sales decline.

(A review of the 1983 car market in the UK appeared on February 3)

ITALY	1982	%	1983	%
Domestic	998,459	59.20	1,002,357	63.40
Imports	686,121	40.80	579,670	36.60
Total market	1,684,580	100.00	1,582,027	100.00
DOMESTIC				
Fiat Auto (Fiat/Lancia/Autobianchi)	869,787	51.60	876,130	55.40
Alfa Romeo	106,655	6.30	104,182	6.60
Innocenti	19,767	1.20	13,723	0.90
IMPORTS				
Renault	185,871	11.10	161,642	10.20
Peugeot-Citroen-Talbot	142,607	8.40	100,931	6.40
Ford	84,916	5.00	72,276	4.60
Volkswagen	89,189	5.30	68,503	4.30
General Motors (Opel)	62,445	3.70	55,371	3.50
BMW	26,232	1.60	28,237	1.80
BL	31,630	1.90	27,093	1.70

FRANCE	1982	%	1983	%
Domestic	1,427,008	69.39	1,355,097	67.38
Imports	629,482	30.61	655,789	32.62
Total Market	2,056,490	100.00	2,010,886	100.00
DOMESTIC				
Renault	804,968	39.10	704,585	35.00
Peugeot group:				
Peugeot	261,394	12.70	295,194	14.70
Citroen	248,975	12.10	259,734	12.90
Talbot	111,610	5.40	89,176	4.40
Total Peugeot	621,979	30.20	644,104	32.00
IMPORTS				
Ford	132,815	6.50	142,453	7.10
VW/Audi	124,410	6.00	116,446	5.80
Fiat	101,491	4.90	100,986	5.00
General Motors (Opel)	51,823	2.50	77,743	3.90
BL	33,081	1.60	32,089	1.60
BMW	33,467	1.60	33,070	1.60

JAPAN	1982	%	1983	%
Domestic	3,002,950	98.83	3,100,475	98.87
Imports	35,564	1.17	35,336	1.12
Total market	3,038,514	100.00	3,135,811	100.00
DOMESTIC				
Toyota	1,173,850	38.63	1,247,610	39.78
Nissan	822,375	27.06	833,145	26.56
Toyo Kogyo (Mazda)	247,357	8.17	244,544	7.79
Honda	239,579	7.88	245,132	7.80
Mitsubishi	225,780	7.43	189,369	6.03
Daihatsu	76,799	2.52	112,216	3.57
Suzuki	81,980	2.69	90,969	2.90
Fuji (Subaru)	77,270	2.54	79,681	2.54
Isuzu	57,949	1.90	57,809	1.84
IMPORTS				
Volkswagen	15,076	0.49	13,227	0.42
Mercedes	5,739	0.18	6,428	0.21
BMW	5,293	0.17	6,298	0.20

APPOINTMENTS

Lep directors move

Mr Thomas W. R. White succeeds Mr Dermot Leeper as managing director of LEP AIR in the UK and will be based at Heathrow. Mr Leeper has been appointed president of Lep International Inc., in Canada. Mr White joins Lep from Pandair Freight where he was Group managing director for 18 years. Mr Leeper will be based in Toronto and will take over from Mr Peter Brewer, who, in turn moves to take over as president of Lep Transport Inc., U.S., based at Boston. This follows the retirement of Mr Walter Pelitzer in December last year. Mr Leeper joined Lep in 1973 when he opened the group's Houston, Texas branch.

Mr David K. Newbigging has been appointed a non-executive director of PROVINCIAL INSURANCE from April 25. He will also join the board of Provincial Life Assurance Company. Mr Newbigging recently retired as chairman of Jardine Matheson and Co. He is a member of the international council of Morgan Guaranty Trust Company of New York and recently rejoined the board of Rennies Consolidated Holdings of South Africa.

YORK TRAILERS HOLDINGS has appointed Mr James F. Davies as joint managing director. He has been managing director of Scammell Trailers and of York Trailer International.

Mr Stuart Soloway has been appointed managing director of SHOPPERS PARADISE. The existing supermarket and superstores divisions of Fine Fare Group are being merged to form a combined retail division. Mr John Allan is appointed director, Fine Fare Retail, with overall responsibility for buying, marketing and operations. Mr Matthew McKenzie becomes operations director, and Mr Robert Gavaghan becomes director, productivity, in addition to director, non-foods.

At MUNTON AND FISON (HOLDINGS) Mr David Wells has retired as non-executive chairman. Mr Tom Wells was appointed a non-executive director in place of his father. Mr Andrew C. Shelley has been appointed chief executive. He was finance director. Mr Tom Rothery has been promoted to sales director. Mr Archie Elks has retired but remains a non-executive director. Mr Cyril Chambers has been appointed technical director on Mr Elks' retirement.

Mr Jonathan Aitken has become chairman of the Middle East advertising agency, FIENNES, PERRY AND PARTNERS. He is chairman of merchant bank, Aitken Hume Holdings.

Mr Thomas Iain Campbell has been appointed managing director of SCANDURA, BBA Group conveyor belting and industrial textiles subsidiary, in succession to Mr Ron Whittell, who has retired. Mr Campbell has been a director of Scandura since 1970.

Mr Ralph Levy, having completed the handover of Dannimac to WILLIAM BAIRD which acquired the business from his family interests in December 1981, has retired from his executive appointments with Dannimac. He remains on the board of William Baird as a non-executive director.

SHERWOOD COMPUTER CENTRE, Romford, has appointed Mr David F. Lawrence as financial director and company secretary. He joins from Datastream. Sherwood claims to be the most experienced and longest-established software specialist and computer bureau in the London insurance market serving over 180 Lloyd's syndicates and 50 insurance and reinsurance companies.

REEVES BROWN ASSOCIATES has appointed Mr William Gill as director/actuary. He was a director of Godwin.

J. H. MINET AND CO has appointed Mr Michael [illegible] as executive director of the fine art and jewellery division. He becomes managing director of the division on April 1 following the retirement of Mr Joe Cook on March 31.

Mr John Evans has been appointed managing director of EXXON OFFICE SYSTEMS (UK). He was chief executive of [illegible] and prior to joining EXXON was the managing director of Comdial UK. Exxon Office Systems (UK) is a wholly owned subsidiary of Exxon Office Systems Company, headquartered in Stamford, Conn., a division of Exxon Enterprises, itself a division of Exxon Corporation (known as Esso in the UK).

ABBEY LIFE ASSURANCE COMPANY has promoted Mr Roger Willetts to assistant executive director, field operations division from April 2.

Mrs Victoria Krickie and Mr Alastair Nelson have been appointed directors of MESSEL FUTURES.

Mr Antony Bates has been appointed an associate director of CHARLES BARKER CITY.

Dr Tito Bastianello has been appointed a director of EMPIRE STORES (BRADFORD).

Mr Kenneth Ripp has been appointed a director of CUDDS, JOHN AND WESTRUP (UNDERWRITING), specialist yacht insurance underwriters. He is also on the board of Sphere Drake Underwriting Management, an associated company.

CONSTRUCTION CONTRACTS

Monk to build £9m Risca by-pass

A £8.7m contract to build the northern section of the Risca and Rogerstone bypass on the A467 in Gwent has been awarded to A. MONK AND CO by Gwent County Council. The contract, to be completed *in the spring of* 1986, comprises construction of 3.6 km of dual carriageway from Pontymister to the Full Moon Tip, near Crosskeys. A roundabout will be built at this point with a single carriageway link to the A4048 and A467 roads. This involves construction of a further 1.2 km of new road. Monk will also construct three road bridges, three river bridges, two foot bridges and two subways. *Among other contracts recently* awarded is a £1m project for building and civil engineering work for the BOC Group (Cryoplants) on a site at Chinnor Road, Thame.

*

Contracts totalling £2.5m have been awarded to DOUGLAS companies for work in the Sultanate of Muscat and Oman, and in Saudi Arabia. Douglas OHI LLC has gained two contracts, *each worth £750,000, in* Muscat and Oman. One is for work associated with construction of an electricity sub-station *in* the capital area of Muscat. Douglas OHI is working as subcontractors to GEC. The second contract is for a store for the Royal Oman Police. In both cases contract periods are of nine months duration. Al-Esayi Saif Noman Douglas (ASAD) has been awarded four contracts in Saudi Arabia totalling £1m. These include a factory for production of roofing felt in Dhabran, warehouses in Qaseem and Riyadh, and refurbishment of a water bottling factory near Makkah. Douglas OHI LLC and ASAD are both associate members of the Douglas Group.

*

HENRY BOOT CIVIL ENGINEERING has been awarded a £1.45m contract for construction of a by-pass around the village of Watton at Stone on the A602 between Hertford and Stevenage, Hertfordshire. The works, for Hertfordshire County Council, involve constructing 2.3 km of single 7.3 metres carriageway with 1 metre hard strips, 0.4 km of single 7.3 metre carriageway, two small roundabouts and one tee junction. An existing road will be realigned and pass over the main carriageway.

Two 2,500-tonne cement silos with high level connecting walkways and weighbridge pits are to be constructed by slipform techniques at the Blue Circle Hope Cement Works in Derbyshire, at a cost of £900,000. In addition foundations for four 250-tonne steel/cement silos including weighbridge pits are to be constructed.

*

A total of £3.2m civil engineering and building contracts have been won by CEMENTATION CONSTRUCTION, a Trafalgar House company. Work includes two contracts at London's Gatwick airport worth about £500,000. One is for the British *Airports Authority for extension* work to the south terminal, and the other is for British Rail on the Gatwick Station concourse. At Esher a £750,000 contract to demolish and reconstruct a road bridge over the River Mole for the Thames Water Authority will start shortly, and in Jarrow, a £570,000 rail bridge will be built in four months for British Rail. For the Property Services *Agency, £1.1m contract is under* way for construction of steel-framed buildings at ROF Glasgoed, Usk, Gwent.

*

WIMPEY CONSTRUCTION UK *has been awarded* a *two stage* contract worth £1.3m for a supermarket, retail units and a car park in Hill Street, Saffron Walden. The part management fee contract is placed by Hunting Gate Developments, and comprises a brick clad structural steel and reinforced concrete frame supermarket sales and warehouse area. Their combined area will be 2,334 sq metres with 997 sq metres of shops and a 356 *space two-level reinforced* concrete car park. Work has started and contract stage one is due for completion mid July 1984 and contract stage two by April 1985.

*

Shepherd wins £8m work

SHEPHERD CONSTRUCTION has secured contracts worth over £8m. Largest is for construction of a community hospital et Ilkeston, Derbyshire, for Trent Regional Health Authority, with a contract value of over £4.5m. The hospital will provide 92 beds together with operating theatre, x-ray, outpatients, rehabilitation, and day patient facilities Shepherd Construction is the main contractor for British Telecom for the Telephone Engineering Centre et Milton Keynes. The contract value is over £1.7m.

At Treforest, the company is main contractor for an officers mess, gate house and administration building at HM Prison, Cardiff, for the Home Office. The contract value is £1.6m. Site work has started and is scheduled for completion in July 1986.

*

Three orders worth over £5.5m for re-roofing, cladding and pstent glazing have been won by RUBEROID CONTRACTS. Already in progress is the re-roofing of a 27,000 square metre factory building for Ford at Dagenham worth £1.6m; about to start is s £3.5m contract et Heathrow for the British Airports Authority's new Terminal 4 building where the sidewall, roof and soffit cladding, internal linings and ceilings is being installed on the 16 enclosed lobbies, ramps and walkways that connect the main building with the surrounding 16 aircraft stands. The *installation of £600,000 worth of* Ruberoid Patent Glazing for the new 4,490 square metre tropical greenhouse at Kew Gardens designed by the Property Services Agency, commences mid-year.

*

ASTRAWALL has received one of its larger UK orders—worth £1.2m—for its patented curtain walling system. Over 6,000 sq metres is to be supplied for the enecffiOtsoP SH RFHRHR the Post Office new north west district office in St Pancras Way, NWE. For a company usually associated with glass buildings, *this contract is unusual in that* the bulk of the infill materials will be brown and buff colour vitreous enamel insulated panels. This project will also use its recently introduced range of fully-reversible aluminium windows in "Post Office" red. Work starts on site in June to complete curtain walling ni six months. Main contractor is Costain Construction.

*

Contracts worth over £4m for house building and maintenance in Greater Manchester bave beeo won by ROWLINSON CONSTRUCTIONS of Poynton, Cheshire. The largest is a £2.07m *contract to* build 87 homes in a clearance area for the City of Manchester. The 78-week contract has started. In North Reddish, Stockport, Rowlinson is building 63 retired people's flats under a £1.4m contract for the Johnnie *Johnson Housing Association of* Bramhall, Stockport. Work is expected to last 78 weeks. Rowlinson is refurbishing 41 council homes at Heaton Mersey under a 36-week, £333,500 contract for Stockport Metropolitan Council, renewing kitchens, *bathrooms* and wiring, and adding central beating. Finally, Rowlinson has set up a bouse repair unit for Salford City Council to respond to day-to-day requests for council bouse repairs. The six-month cootract is worth about *£200,000.*

*

MOWLEM industrial projects division has been appointed by Racal-Millicom to design and construct base stations for a cellular radio public telecommunications service planned to become operational during 1985. An initial two-year cootract worth over £2.5m has been placed for 100 base stations.

*

BALFOUR BEATTY CONSTRUCTION has been awarded the following contracts: Excavation for and construction of a reinforced concrete basement worth £1.7m for the development of s civic hall, shops and offices at Redhill for Norwich Union Life Insurance Society. Construction of s four-storey office block of 2,925 square metres floor area, worth £1.4m, at Redhill for Embassy Development (Holdings). *Phase I extensions,* worth £138,000, to Bramley Bus Garage, Leeds, for West Yorkshire Passenger Transport Executive. Alterations to an existing office block, worth £133,000, prior to s major development at Hatton Cross, London, for London and Metropolitan Estates.

*

HIGGS AND HILL has started work on s £3m management contract with the U.S. Marriott Corp *for refurbishment of the London* Marriott Hotel (formerly the Europa) in Grosvenor Square, W1. The contract, including renovation of the ballroom in less than three weeks, is due for completion in late 1984. The project also comprises conversion and upgrading of existing guest-rooms, including s floor of suites, the entrance hall, laundry, kitchen, food and beverage areas and administration offices.

£8.6m orders for Sir Alfred McAlpine Group

McALPINE OVERSEAS, a member of the Sir Alfred McAlpine Group has been awarded a £6.6m contract by the Omani Ministry of Defence to build accommodation for the Sultanate of Oman Armed Forces at Lanesb—Ghala. Work involves construction of 77 storey two-storey individual buildings, with a total floor area of 9,900 sq metres, together with external infrastructure and services. The project is to be completed in 14 months.

Sir Alfred McAlpine (Sudan) A.G. has been awarded a £725,000 contract by Sudan Ren Chemical Fertiliser for the construction of roads, ditches and pavings at its Khartoum factory. The contract period is seven months.

The City of Birmingham has awarded two contracts worth a total of £1.32m to Sir Alfred McAlpine and Son (Southern). The first, valued at £1m, is for the education committee and involves the reorganisation and improvement of Marsh Hill School, at Hampton Road, Erdington, to form the Josiah Mason Sixth Form College. Work includes structural alterations to create new facilities and the upgrading of the internal and external environment of the building and scheduled for completion in 44 weeks. The second, for the housing committee, worth £316,000, is to construct a two-storey office block at Stonebrook Way, Weoley Castle. The contract includes reinforced concrete foundations, brick superstructure and tile clad roof. The project is due to be finished in 27 weeks.

*

TEN contracts won by WILLIAM MOSS CONSTRUCTION, are worth over £10m. Work includes a workshop and service facility at Borehamwood for Thorn EMI Elstree Studios (£1.4m) and an office block in Grays Inn Road for London and Paris Properties (£668,000). A core store and ancillary building is under construction for The Institute of Geological Sciences at Keyworth (£2.046m). A combined development for Associated Dairies and Charterhall Properties (Warrington) at the Cockhedge Centre in Warrington will provide an ASDA superstore and shop development at £5.70m.

*

WYSEPLAN, Bridlington, has orders totalling over £1m in the construction industry for its Sitelink modular accommodation system. The units link together on site, side by side or end to end to provide a series of different shaped complexes. Sites include a paper mill at Shotton and a new prison at Full Sutton, near York.

THE MANAGEMENT PAGE

EDITED BY CHRISTOPHER LORENZ

Technology management

Why Buffalo is back on the map

Christopher Lorenz examines Warner Lambert's revival in scientific instruments

IT'S HARD to imagine a factory in Buffalo, on the very fringes of smokestack America, turning the tables on the Japanese and starting to make products which are not only at least as good, but cheaper. High technology ones, perhaps, but not "mature" things such as standard laboratory microscopes.

Yet this is precisely what has happened at a plant owned by Warner-Lambert, the large U.S. pharmaceutical and medical equipment conglomerate. Just two years ago the boot was on the other foot, and its microscopes, once the pride of the company, were being undercut by better and cheaper ones from Japan.

In microcosm (as one might say), the turnaround represents the much-vaunted—but as yet largely unproven—ability of American industry to win back vital ground that it has lost to Japan. It also epitomises the importance of a difficult step along the way: combining a company's business strategy with a key element that, surprisingly enough, is frequently missing—a sophisticated technology strategy which embraces research, development, engineering and production.

The strategy through which Warner-Lambert is now regaining market share in microscopes is almost entirely contrary to the one it originally planned to use, but which would have failed on technological grounds. So is its new, winning strategy in the much higher-technology market for fibre optic medical instruments (endoscopes). Different, too, is the way it is now defending its position in opthalmic instruments.

Taken together, these three product lines constitute Warner-Lambert's scientific equipment division. The unit's new strategies and actions have set it on a course where its sales two years from now (without acquisitions) are expected to be a third up on 1982's $125m, and its pre-tax profit double that year's $21m.

Under the original plans, sales and profits were both expected to fall slightly — which would almost certainly have resulted in the division going the same way as the rest of what used to be called American Optical, one of the proudest names in American precision-engineering.

Between 1980 and 1982 Warner-Lambert divested itself of all AO's other four units, which made such products as spectacles, contact lenses, sunglasses, medical monitoring equipment and industrial safety products. "We were quite prepared to sell the instruments business — we see ourselves as portfolio managers", says Warner-Lambert's president, Joe Williams, an enthusiast for strategic portfolio planning. The businesses of his $3bn corporated range from ethical drugs to Schick razors, and Listerine mouthwash to chewing gum. Until two years ago it also owned one of the largest bakery companies in the U.S., Entenmann's.

The adding of a new technology dimension to Warner-Lambert's existing business planning system and the reversal of its original strategies for almost every type of scientific instrument, was the work of Booz Allen & Hamilton, the management consultancy. The success of the changes has spurred Williams and his colleagues to give Booz Allen further assignments of a similar nature in various parts of the group.

Along with a host of other consultancies, Booz Allen had worked for Warner-Lambert on a range of more conventional jobs in the past, but was first called in on what it calls a "technology management" project in late 1981, two years after it had gone public with a package of techniques that improve the link between a company's technology strategy and its business plans.

All too often, this crucial link is totally absent, claim John Harris and Dr William Sommers, two of Booz Allen's senior partners: "We have continually found mismatches between our clients' strategic objectives and their technological investments. Inadequate investment, excessive investment, and improper (unbalanced) investment allocation are all common," they say.

"Generally, a business portfolio is product-oriented," say Harris and Sommers. "It measures a firm's product lines in terms of market position and importance." By contrast, a technology portfolio defines the firm's various product and process technologies in terms of "marketplace position" (including against competition), and of their importance to whole groups of product lines.

Don O'Neill (left) and Joe Williams: riding high in medical optics

As Harris and Sommers emphasise, the reasons for linking the business and technology portfolios, and ensuring their consistency, are compelling. "If they are incompatible, a company runs the risk of developing a potentially attractive strategy based on financial data and other business . . . information only to discover that it lacks the technology strengths needed to achieve its objectives. On the other hand, when analysed in isolation, a technology portfolio can provide an unrealistic or distorted picture of market attractiveness and competitive position."

Harris and his team of consultants were initially called into Warner-Lambert to examine its strategy for fibre optic endoscopes—long bundles of fibres which enable a patient's innards to be examined. The dramatic results of the consultants' work then prompted Don O'Neill, president of the corporation's Health Technologies Group, to extend their work to the rest of the scientific instruments division.

In each case they applied Booz Allen's standard four-part technology planning process.

● Making a technology assessment by internal and external scans of trends in all the critical and relevant technologies. This involved extensive survey work in Japan;

● Developing a technology portfolio (or matrix) to assess the company's strengths and weaknesses, explore potential alternatives or "plays," and define priorities;

● Integrating the emerging technology strategy with the existing business strategy, adjustments being made on both sides using what Booz Allen calls a "commercialisation grid".

● Setting technology investment priorities for each technology and each part of the business.

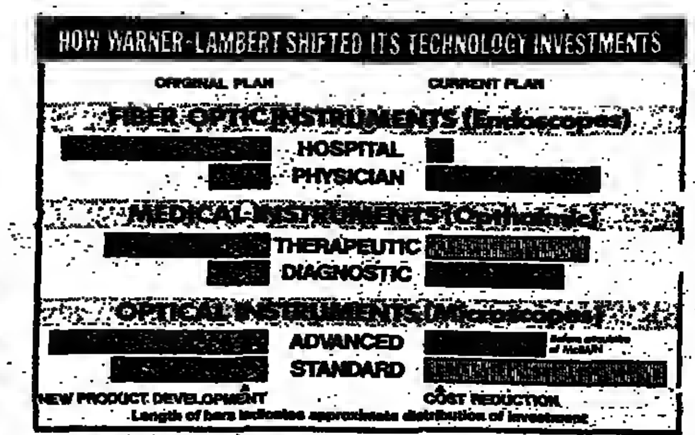
The detailed impact of the consultant's work is explained in the inset and chart (see right). One of O'Neill's vice-presidents, Kirk Merritt, says that in all the various projects "their matrix work was pivotal. It gave the division technological direction, especially on how to live with the Japanese".

Merritt admits that the Booz Allen planning process filled an in-house gap not only by examining "the competitive marketplace", but also by "directing us towards the next technological platform". Neither of these types of analysis and priority-setting is easy for a company to conduct without external help.

O'Neill and Williams may be especially enthusiastic about the success of the new endoscope strategies, but it seems to be the microscope project which has won the consultants most friends down the line at Warner-Lambert. One executive after another praises their skill in "reverse-engineering" Japanese microscopes — stripping them down and borrowing ideas from them, in true Japanese style.

In terms of the ambitious complexity of the rest of Booz Allen's work on technology strategy, this was actually a pretty straightforward exercise. But as a symbol of the way Warner-Lambert is fighting back against the Japanese, it is extremely powerful. No wonder that, within the corporation's glossy headquarters in New Jersey, America's "Garden State", the Buffalo factory is no longer seen as "out in the sticks", but is now well and truly on the map.

This is the second of two articles on technology management. The first appeared on Friday.



THE most dramatic impact of the Booz Allen work was on fibre optic endoscopes and on microscopes.

1 Endoscopes. The market has two segments: hospitals, where the endoscope is used to penetrate deep into the body, often during surgery; and doctors (physicians), where the performance requirements are lower as the instruments are shorter, and where cost plays a more important role.

A comparison was made between the product line's position on a product/market matrix (the ubiquitous "business portfolio"), and its place on a technology matrix. This showed that though the hospital market in itself was attractive, Warner-Lambert was not in a strong position, either technologically or in terms of market share. Especially against the competence of its main competitor, Olympus of Japan, it lacked the sophisticated technology to produce long, high-resolution, defect-free fibre bundles, and was falling further behind.

"This was totally contrary to the company's view," recalls Harris. "It thought it had been catching up."

Booz Allen therefore recommended its client to curtail investment and withdraw from the market. O'Neill confirms that "the company's feeling had been that we should mount a major attack on Olympus." Booz Allen persuaded it that this would be highly unwise.

In the physician segment, the company's starting position was much better, in terms both of market presence and technological capabilities. With its main competitors focussing on hospitals, the consultants advised Warner-Lambert that, through pre-emptive investment, "it could achieve business and technology leadership."

With a much-reinforced investment programme, two new products have since been launched and "the whole strategy has been very successful," according to O'Neill. "It opened a new window for us in fibre optics," says Joe Williams; previously all the windows had been closing.

2—Microscopes. Using the clinical products of its Austrian offshoot, Reichert, as a base, Warner-Lambert had been planning to confront Nikon and Leitz. But both competitors were much stronger, in technology as well as in market share.

In standard microscopes, too, Warner-Lambert had been going for greater sophistication, while the Japanese continued to beaver away beneath it, annexing more and more of its market with low-cost products.

So, in advanced microscopes, Booz Allen recommended that the technology programmes of the division's existing European and U.S. companies be integrated and redirected towards new low-cost products. This would allow a lower level of total investment and offer a higher potential return. To strengthen the division's technology base, it recommended an acquisition; last August Warner-Lambert acquired McBain, a small but leading manufacturer of high precision microscopes.

On standard microscopes the consultants recommended heavier investment, but in cost-reductions to the existing products rather than in the development of new ones. This would allow it to recoup "cost leadership" from the Japanese, and with it market share. Warner-Lambert took the advice, reducing the number of working parts by a third, replacing some metal components with plastic, and so forth. Within six months it was marketing a lower-cost product, which has indeed stopped the rot.

Management abstracts

Negotiators abroad—don't shoot from the hip. J. L. Graham + R. A. Herberger in Harvard Business Review (U.S.), July/Aug 83

Argues that Americans—being "competitive, argumentative and impatient"—make bad negotiators when dealing with non-Americans; gives examples of how the "shoot-first-ask-questions-later" style can create difficulties overseas; discusses how these could be eased and points to implications for negotiator training.

Quality is more than making a good product. H. Takeuchi and J. A. Quelch in Harvard Business Review (U.S.), July/August 1983

Claims that discussion on quality control has tended to concentrate on worker motivation and the production process; argues that the best products can fail if they do not fit the customers' perceptions of high quality or if the appropriate after-sales service is unavailable and urges constant monitoring in these two areas.

Issues management. J. Johnson in Business Quarterly (Canada)), Autumn 83.

Defines issues management as the early anticipation—through scanning/monitoring—of threats and opportunities embodied in socio-political issues, their identification/evaluation/analysis by a task force; followed by the subsequent planning and implementation of strategies. Identifies obstacles and advises how to "sell" the approach to operational management.

Pensions during takeovers and mergers. R. Jagelman in The Accountant (UK), 1 Dec 83.

Describes pension fund implications of a company takeover and outlines some typical pension agreements covered in a sale agreement; focuses on the impact of a takeover on past and future pension rights, and on the fund trustees.

Winning managers' trust in forecasting. A. B. Maltz in The Journal of Business Forecasting (U.S.), Autumn 83.

Explores issues which business forecasters must face if they are to win management's confidence—ability to make themselves intelligible, accuracy, and fitting forecasts to organisational needs.

These abstracts are condensed from the abstracting journals published by Anbar Management Publications. Licensed copies of the original articles may be obtained at £3 each (including VAT and p and p; cash with order) from Anbar, PO Box 23, Wembley, HA9 8DJ.

مكتبة الأصيل

THE ARTS

Jumpers/Royal Exchange, Manchester

Michael Coveney

The first major British revival of Tom Stoppard's lunatic farce *Jumpers* (1972), starring Tom Courtenay and Julie Walters, promised to be a major event and Manchester responded by buying up all the seats for the run (which extends until April 7) within two days of the Royal Exchange putting them on sale.

Having unavoidably missed Thursday's opening, my Friday lunchtime journey from Euston was a little low-key as a result of glancing at a couple of grumpily unimpressed accounts of it. The evening performance, however, was a delight. Tom Courtenay is not as inherently funny an actor as Michael Hordern, but he plays George Moore, the professor of moral philosophy, with superb comic urgency and he benefits from this theatre's intimacy in the long, wonderfully entertaining speeches which comprise his tortured preparation of a lecture on the subject of "Man—good, bad or indifferent?" Julie Walters as his wife Dotty, for whom the moon landings have destroyed romance, and, by extension, her career as a singer of romantic songs, is absolutely first-rate, matching eccentricity and desperation in much juster proportions than did Diana Rigg at the National.

Mike Arron

Tom Courtenay and Julie Waters

Dotty's bedroom and George's study have to be noisily trucked in, but an audience quickly adjusts to this convention and Nicholas Hytner's vigorous and intelligent production—one of the best at this address for some time—lays out the play with exemplary clarity and allows you to enjoy the myriad felicities of Stoppard's invention, be they physical, linguistic or, as is frequently the case, both.

Jumpers is a farce about the loss of faith, or the quest for God, however you care to look at it. It is about belief and rationality and it also explodes the language of moral philosophy in a cascade of wit while simultaneously developing a murder mystery thriller of illogical plausibility. The team of yellow-suited jumpers are logical positivists. One of them is shot away from a pyramid formed at Dotty's post-election party. The Radical Liberals have swept to power, a veterinary surgeon is appointed Archbishop of Canterbury.

Dotty is out of tune with the times, and the band, her breakdown relieved only by visits to her bedroom by the vice-chancellor, Archie (played with impeccable suavity by John Bennett), and fleeting charades with which she pulls wool over the jumper's corpse whenever George absent-mindedly invades her space. Dotty's own surface is investigated by Archie whose roles include that of a dermatologist lover (he loves Dotty, not dermatologists). The dead jumper was called Duncan, hence the *Macbeth* echoes early on, and his demise is rationally accounted for just at the play's climax when George's illustrated lecture props of a tortoise and hare are the victims of his own randomly distributed physical existence.

Stoppard's complex sight-gags prove the greatest challenge to the in-the-round treatment, but Mr Hytner gets away with most of them and drives the evening on to a splendidly Expressionist finale at the symposium, where Dotty descends on a silver spangled moon and we are triumphantly assured that man has gone ape.

Mr Courtenay, less eccentrically rumpled than was Mr Hordern, begins by suggesting he is embarked upon an unfunny Alan Bennett impersonation, but finishes in a splendid rage against the world and its philosophers, a rage he has justified by progressing with steely, steel-eyed purpose through the play. Another revelation is the emotional chasm both leading actors convey in a marriage that should never have gone wrong: Dotty and George, in fact, are both guardians of traditional, worthwhile values which have been placed under grave threat by advances in religion and philosophy, in space and on earth.

Amanda Orton swings decoratively from the party chandelier and is even impressively mute thereafter as the secretary. Her surname started me reflecting on how similar to Truscott in *Loot* was the stage-struck policeman Bones (whose brother, an osteopath, suffered from cognate syndrome—a specialist area of Archie's—changed his name to Foot and then became a chiropodist). Barry Jackson, who obviously had no choice in *his* career, plays Bones, while John Gay (I didn't say a thing) is, in a neat piece of casting, Crouch. George Moore, in this production, is not the only name with which to conjure.

New Galileo/Apollo, Oxford

Clement Crisp

Siobhan Davies' new work for tha London Contemporary Dance Theatre was on view in Oxford during the latter part of last week. I think the specious Apollo Theatre stage suits the piece, for an undercurrent of its plotless action seems the way a dancer occupies space, how movement may spread or contract, intruding into areas of others activity, and how our perceptions about movement may be guided.

Like much of Miss Davies' choreography, *New Galileo* has an air of intellectual calculation and of precise judging of dynamics. Her fine-tuning of spatial considerations is also clear in the design and lighting by David Buckland and Peter Mumford, who have divided and illuminated the stage as three lateral sections by means of two spidery gantries carrying light battens, with behind them skewed panels which show a dancer in a studio, some birds, and what might be the top of a *crème brulée*, all gradually focused during the course of the dance.

At curtain rise the stage is divided, Gaul-like, in three equal parts, with Jonathan Lunn alone in the central section. The developing action finds the seven other members of the cast—four couples, in effect—first dancing only on stage right, until the movement's patterns gradually cross the stage and we also become aware that the gantries are oh-so-slowly separating to widen the central dance area. This imperceptible mechanical action is matched by the gradual shifts of the minimalist piano score — John Adam's *Phrygian Gates*—whose quick finger patternings suggest Czerny or Kalkbrenner having a nervous breakdown at the keyboard, and are superbly played by Eleanor Alberga.

The choreography sometimes reflects the music's ostinato through the dry and exhausted procedures of post-Cunningham rigour (that curse of the British dance avant-garde), but like the note-clusters it spreads and gains energy. *New Galileo* remains until the end a work of controlled and sometimes cerebral effects, but these are of increasing power, and the four male solos, which presage the final reunion of the dancers in lines of sweeping movement are very impressive, and very impressively done by Jonathan Lunn, Darshan Bhuller, Michael Small and Patrick Harding-Irmer.

I did not suppose that *New Galileo* would yield up its secrets at a first viewing: I look forward to renewed acquaintance during LCDT's May season at Sadler's Wells.

Power of Darkness/Orange Tree

Martin Hoyle

Originally banned by Tsarist Russia, Tolstoy's best-known play boasts at least two scenes as spine-tinglingly tense as any in European drama in the past century.

In one, a dying farmer begs forgiveness of a worker he has treated harshly. The youth is the secret lover of the farmer's wife and is overcome with remorse and pity. Neither man realises that the landowner is the victim of poison administered by his wife and provided by the boy's mother, a rapacious crone with plans for her son's future.

The thought of opera recurs in the climatic sequence, brutally cathartic, when the young man crushes a new-born infant to death with a plank and is urged to bury it in the cellar by the two women. Haunted by its wailing and the sound of its "little bones crunching," he collapses into anguished impotence as his mother contemptuously shoulders the shovel to dig the hole herself.

At the Orange Tree, Sam Walter's direction could throw Tolstoy's marvellously theatrical sense of irony into sharper relief—the intrusive visit of a chatty neighbour as the poisoned man groans his last, and the off-stage wedding celebration that forms a background to the baby's murder emerge as no more than turns by character players.

Anthony Clark's translation is vigorous, even on the dangerous ground of folk wisdom and rustic saws. As an ex-soldier turned labourer Andrew MacLachlan brings off a funny exposition of how capital and interest make the peasant world go round without ever lapsing into mummerset. Roberta Taylor's adulterous, finally deserted, poisoner is slightly underplayed as if nervous of the part's full implications; similarly Eva Shickle's terrible old mother can score points with a casual throwaway approach to such moments as when she tosses the lethal powder on to the table in a conversation about sleeping draughts, but draws back from the full monstrousness of the character.

Madeline Church, the sullen near-simpleton stepdaughter, cleft palate much in evidence as she snarls knowingly at her father's suspected killer, incisively confirms the impression she made recently in *Nightshade's* funereal goings-on at the King's Head. And Garry Cooper, self-indulgent, sensual, brutally selfish, and at the last taking the sins of others upon himself, is entirely worthy of the play.

Orpheus and Eurydice/Leeds

Max Loppert

The virtues of Opera North's first Gluck production, revealed on Saturday, are very largely musical. The edition of this most textually-complicated of operas chosen is, for once, disappointingly, not Gluck's pure, short original ("Vienna," 1762) but the amplified Paris revision of 1774, with its tenor hero transformed into female alto (Opera North in fact subscribes to the intentions of Berlioz, who first worked the transformation, more closely than is usually the case). The longer *Orpheus* version is hard to sustain in the theatre, but David Lloyd-Jones, conducting of the excellent English Northern Philharmonia, faced the task with a blend of naturalness and stylistic sympathy that succeeded in solving almost every musical problem.

The secret of successful Gluck conducting lies in the command of tempo that seems neither fast nor slow (though it may be either), but absolutely inevitable in dramatic context, that allows words and music to breathe with both the quick sentience and the amplitude of phrasing they properly require. On this showing, Mr Lloyd-Jones possesses that command: whatever may have been taking place on stage, and despite the decision to play the work without break, musical interest was never allowed to flag nor the orchestral tone to lose its airy limpidity; the very simplicity of Gluck's invention sounded as it always should (but, in the theatre, quite often doesn't)—the product of revolutionary genius.

Felicity Palmer undertakes here her first Orpheus. The Berlioz recasting of the line does not lie entirely satisfactorily for her; low phrases notably lacking the firmness of projection achieved higher in her compass. But her distinction as a performer of classical roles, already proved in Gluck and Berlioz, ensures a special vividness of vocal and physical bearing throughout the immensely arduous progression from grief, to hope and back again; her delivery of the Act 1 bravura air has the flash of metal; that of the great lament a wonderfully individual and unforced tenderness.

Patricia Rozario, Eurydice, is a young soprano who lights up the stage with every gesture, and, though her voice is not yet fully matured, she uses it in a way that avoids all suggestion of the lachrymose. (She cedes her Elysian Fields air to Susan McCulloch, a Blessed Spirit.) Cathryn Pope's Cupid—or "a young stranger" as he becomes here—is pure and stylish, perhaps not ideally bright of timbre.

All this, and Andrew Porter's admirably skilful new English translation, are the raw material for what might have been a bold, fresh, and uncluttered account of a work that for all its fame and popularity notoriously resists complete theatrical success. In Philip Prowse's production, played in his own designs, that success is kept tantalisingly out of reach. As in every Prowse staging I have seen, the visual imagery is instantly memorable; here, a rough-textured space lined with inscribed slabs proves severely and beautifully apt to an opera of nakedly simple passions and situations classically formulated. But in Mr Prowse's production, that simplicity is repeatedly flouted. In Cupid's presence almost throughout, an 18th-century gentleman in court dress, there is supplied a maddening obfuscation of Orpheus' own trials and torments.

The unbroken progress of the action means that contrast of scenic locations is reduced, and has to be regained by artificial and sometimes damagingly awkward means; quite a lot of the supporting detail is obscure, and not worth puzzling over. Crucial moments, above all Orpheus' very first cry of "Eurydice!" above the chorus line, are fumbled, as is the placing of the chorus itself. In a work where dance is almost as important as song, no attempt has been made to supply the former—until the end, when the Chaconne is used to accompany some risible pseudo-chinic evolutions. The danger, in any revival of a work so directly concerned with the myth of the artist and his art, is that artiness will seep in. It is a danger to which this production shows itself all too open.

Theatre news in brief

Glenda Jackson is to star in a revival of *Strange Interlude* by Eugene O'Neill. The play, which runs for more than four hours, charts one woman's search for identity over a period of 30 years. The cast includes Brian Cox, Edward Petherbridge and James Hazeldine. *Strange Interlude* opens at The Duke of York's Theatre, London, on April 5.

*

Richard O'Sullivan, Tim Brooke-Taylor and Bernard Bresslaw take over the leading roles in *Run For Your Wife* at the Criterion Theatre from March 12.

*

A new play by Michael Frayn, *Benefactors*, opens at the Vaudeville Theatre on April 4. Starring Patricia Hodge, Oliver Cotton, Tim Pigott-Smith and Brenda Blethyn, the play explores the relationship between four friends.

*

Three one-man plays by the actor Jack Klaff are being presented at the Donmar Warehouse until March 10. *Cuddles*, a play about relationships between men and women which won a Fringe First at Edinburgh in 1982, and *The Fifty Minute Hour*, an essay on psychoanalysis are being performed from Tuesday to Saturdays, and on Saturdays *Nagging Doubts*, "an assault" on South African politics, is also being presented.

Architecture

Gillian Darley

Lionization and the price of fame

From Thursday, the RIBA's Heinz Gallery, in Portman Square, plays host to an exhibition of work by Michael Graves. Though there are models, line drawings and some plans, the large part of the exhibition consists of misty, coloured pencil drawings displayed in a gallery specially transformed by Graves into a suitably tonal setting.

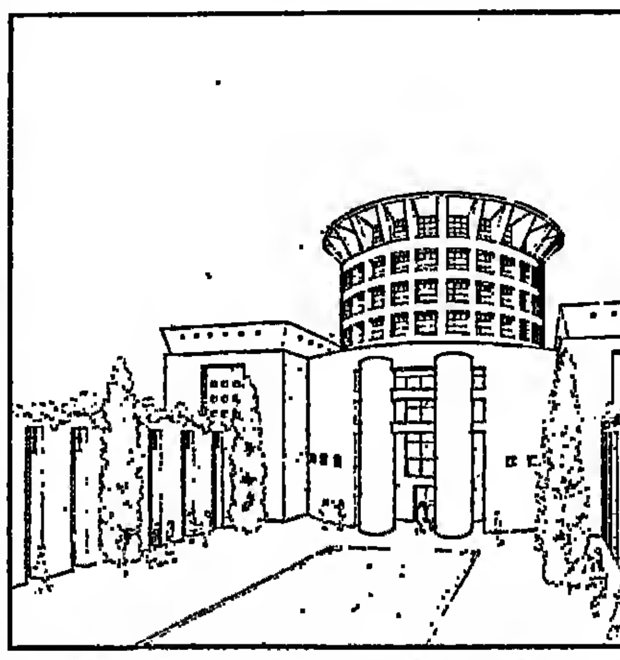
Michael Graves is something of a phenomenon: he is the architect as superstart and also the man who made the architectural drawing as "collectible" in that awful American term.

Whether as erudite, not to say recondite, professor, painter and furniture designer, or practising architect, Graves is very closely watched indeed. His kind of stardom may bring acolytes, not bodyguards, disciples, not fans, but in most respects it is not so far from other forms of fame. Now attention focuses on him with particular reason; he is, at last, building large schemes and quite a few of them. Several of them feature in the exhibition although it takes a considerable mental effort to connect these vaporous images with the activity of construction.

These dainty drawings are both self-conscious art object and diary—and in the latter case very much for publication. It is via his drawings, and the strength of his reputation as an intellectual architectural academic (he has taught at Princeton since 1962) that he became widely known—particularly from the early 1970s.

The two activities link his penchant for elaborate art historical references: in the early '70s the vocabulary was Cubist (the cubism of Juan Gris, revealingly, rather than that of Braque or Picasso) but more recently he has dived headlong into classicism, in particular Mannerism, with wiffs of the Egyptian, of the arcadian, even of Mussolini's EUR enlivening the mixture.

These drawings should not, however, magpie their sources and tasteful their presentation, be underestimated. Across the architectural schools of the U.S. and Europe a swathe of students learned to draw up their schemes the Graves way while, with his example, among others, to band, self-styled Post-modern architects have joined hands around the world to produce a plethora of Gravesian detail—pergolas, lattice gridded door and window details, Mannerist inversion of the classical repertoire (with the keystone supreme) and much more. Architectural lionization is, unless you follow the example of James Stirling and keep your head well down, a terrible fate.



Courtyard of the Ohio State University Visual Arts Center

The question, elegantly and justly raised by Vincent Scully in his essay in the recently published Graves monograph, is whether the desires for both allusion and illusion can provide architecture convincing at the level it will be experienced by its users. Scully found the work of the 1970s "a little sad . . . attunded to theatrical optical effects and illusion." But in his view, faced by Graves' first complete large-scale commercial building, the Portland Public Office Building (completed in 1982), that structure was the vindication. Judging from photographs alone, the elevations translated from the drawings to polychrome reality, it is hard to agree.

In the exhibition the scheme which most closely parallels the Portland building *is* the 27-storey Humana building in Louisville, Kentucky — now under construction. Won in competition, with Norman Foster placed second, it is hard to avoid seeing a formula emerging — the ritual dance around the entrances, the uneasy tinkering with parapets and skylines, sections of the skin peeled off or reinstated.

Much more telling, for an architect who looks to Italy for what he terms "archetypical elements" *is* the Visual Arts Centre for Ohio State University, Columbus, Ohio. This is centred on a great rotonda, a drum which is both focus and formal entrance and axis. Was Graves looking at the Pantheon, Roman tombs along the Appia Antica or was it to France, with Ledoux? It is an irresistable game; but here the references and the arrogance pay off. It is a scheme of substance and suggests the kind of *gravitas* that suits a cultural shrine of middle America. Little else in the exhibition compares with it, as architecture — or as expression of language of Michael Graves.

At Vassar he has failed to deal with the existing collegiate Gothic, adding an awkward block for the Art History Department which looks accidental, a mistake. Elsewhere there is a Pompeian-style Environmental Education Centre, in New Jersey; plans for four Schinkelesque town houses in Cincinnati; the refronting of a Tokyo department store and a vast riverside commercial development in San Antonio, Texas.

The Graves office is working flat out. Just a few years ago it handled small, mostly domestic commissions. It was hard to balance the weighty reputation of the architect against the scant evidence on the ground. Now all is reversed. Somehow all that theory has to be borne out in practice. Graves has undoubtedly and valuably animated the architectural discussion, inspiring strong reactions, but he begins to look like a one-man Battle of the Styles and the loss, I fear, will be the reputation of Michael Graves.

Russ Abbot's West End debut

The TV comedian Russ Abbot is to make his West End stage debut in May when he stars in a new production of the Neil Simon musical *Little Me*. He will play eight parts in the musical, which tells the story of a seedy nightclub singer and the men in her life. *Little Me* opens at the Prince of Wales Theatre on Wednesday, May 30.

Arts Guide

Music/Monday. Opera and Ballet/Tuesday. Theatre/Wednesday. Exhibitions/Thursday. A selective guide to all the Arts appears each Friday.

March 2–8

Music

BRUSSELS

Ruggiero Ricci, violin, and Roger Vignoles, piano. Beethoven, Bach, Debussy, Yeaye and Saint-Saens (Tue). Palais des Beaux Arts.

Rotterdam Philharmonic Orchestra conducted by Edo de Waart with Yuzuko Horigome, violin. Mozart, Piston and Mendelssohn. Palais des Beaux Arts (Thur).

ZURICH

Tonhalle: Tonhalle Orchestra conducted by Olivier Cuendet with Dawn Reinhart, trumpet. Mozart, Haydn, Francaix and Ravel (Wed); Trio di Milano. Haydn, Shostakovich and Dvorak (Thur).

LONDON

London Philharmonic Orchestra conducted by Jesus Lopez-Cobos with Cho-Liang Nin, violin. Mendelssohn and Brahms (Tue). Royal Festival Hall (928 3191).

BBC Northern Singers conducted by Stephen Wilkinson with Keith Swallow, piano. Schumann, Vaughan Williams, Holst and others. Queen Elizabeth Hall (Tue). (928 3191).

Coull String Quartet: British String Quartet series. Purcell Room (928 3191). (Tue 6pm).

London Mozart Players conducted by Harry Blech with James Watson, trumpet and Claude Frank, piano. Mozart, Haydn and Beethoven. Royal Festival Hall (Wed).

Edward Heath conducts the London Concert Orchestra with Felix Schmidt, cello. Mozart, Tchaikovsky and Beethoven. Barbican Hall (Wed). (638 8891).

PARIS

Orchestre Colonne conducted by Kurt Redel, Colonne Orchestra Choir conducted by Jean Sourisse: Haydn's Creation (Mon). Salle Pleyel (561 0630).

Glenn Gould, piano – projection on video screen of B. Monsaingon's film: Bach (Tue). Salle Pleyel (561 0630).

Ensemble Orchestra de Paris marks the 10th anniversary of Darius Milhaud's death: Milhaud, Liszt, Beethoven (Tue). Salle Gaveau (563 2030).

Wilhelmenia Fernandez, soprano: Classical music and Spirituals (8.30 pm Tue and Thur). Théâtre de la Ville (274 2277).

Nouvel Orchestre Philharmonique conducted by Zoltan Pesko: Rimsky-Korsakov – The Legend of the Invisible Town of Kitege (Wed). Théâtre des Champs Elysées (723 4777).

Orchestre de Paris conducted by Daniel Barenboim. Murray Perahia, piano: Schubert, Schumann, Ravel, Boulez (Wed, Thur). Salle Pleyel (561 0630).

Rudolf Firkusny, piano: Schubert, Schumann, Janacek, Martinu (Thur). Théâtre des Champs Elysées (723 4777).

Anne Queffelec, piano: Beethoven, Chopin (Thur). Salle Gaveau (563 2030).

Jean Estournet, violin, Martine Roche, harpsichord: Bach (Thur 12.30 am and 3 pm), Salle Chopin-Salle Pleyel (561 0630).

NEW YORK

New York Philharmonic (Avery Fisher Hall): Gunther Schuller conducting, Sol Greitzer violin. Stamitz, Schuller, Tchaikovsky (Tue); Rafael Kubelik conducting. All-Smetana programme (Thur); Lincoln Center (874 2424).

Boston Symphony (Carnegie Hall): Seiji Ozawa conducting, Maurizio Pollini piano. Mozart, Schoenberg, Strauss (Mon). (247 7459).

Guarneri String Quartet (Alice Tully Hall): Andre-Michel Schub piano. All-Franck programme (Wed, Thur). Lincoln Center (362 1911).

WASHINGTON

National Symphony (Concert Hall): Yehudi Menuhin conducting, Anton Kuerti piano. Elgar, Chopin, Tchaikovsky (Tue, Wed mat, Thur). Kennedy Center (254 3776).

CHICAGO

Chicago Symphony (Orchestra Hall): Leonard Slatkin conducting Radu Lupu piano. Ravel, Carter, Beethoven (Thur). (435 8122).

PHILIPPINES

Manila: CCP Main Theatre: Philippine Philharmonic Orchestra and Philippine Madrigal Singers conducted by Francisco Feliciano. All-Tippett programme with the piano concerto conducted by the composer, soloist Carmencita Sipin-Aspiras. (Wed).

Enslaved by Dreams/ICA

Michael Coveney

The worst show I have seen all year was Monstrous Regiment's Wild West *Calamity* in Kilburn, but the same company runs it a close second with this lumpen, intellectually arid and physically inept piece about Florence Nightingale. It is clear no one involved knows how to take a pulse, or can be bothered to explain to an audience who Sidney Herbert was, or can—and this is the astounding news—even work up any sort of animated response to the feminist heroism of the great lady beyond a routine sniggar at her concern for the military in India.

The format is the same as in *Calamity:* three actresses in a fixed setting mumbling banalities. Chris Bowler, who has devised and directed the piece, dampens your spirit from the off. The three girls arrive in a dead march carrying candles.

Gemma Jackson's design is a cut-out room with beds and a writing table.

In blue, Sally Cranfield represents tha young Victorian busting out of repressive corsets to a career in nursing. In grey, Tamsin Heatley is a prim caricature of the Crimean heroine, slopping out buckets and buttonholing members of the audience with her notes on nursing. In cream, Celia Gore-Booth is the crotchety, bed-ridden old lady, bossing everyone around to tha last. Tha trio execute some laughably primitive choreography, tumbling over beds and combing each other's hair, that sort of thing and perform the odd Victorian parlour song.

Fleeting references to the Barrack at Scutari or the catastrophic conditions endured by the soldiers are not allowed to interfere with the overall mood of incompetent miasma. It goes without saying that Monstrous Regiment has nothing of note to say about the nursing profession or the fate of contemporary Nightingales. Nurses and feminists might, indeed, regard the show as nothing so much as a rather bizzare form of treachery.

Lontano/St. John's, Smith Square

Andrew Clements

The concerts put on by the Society for the Promotion of New Music are inevitably hit-and-miss affairs; were the proceedings any more predictably accomplished (or predictably awful) they would rapidly lose their savour. Yet Wednesday night's Lontano programme was perhaps less satisfying than many and what interest there was lay chiefly in the two "revivals" of pieces by more or less established composers.

Among the three premieres a partial exception must be made for Richard Hughes' *Summer Grasses*, a *haiku*-inspired efflorescence for soprano and a Boulezian ensemble of 'spiels and 'phones: harmonically lucid and embedding a pleasantly contoured vocal line in its glistening textures. But in Erika Fox's *Quasi una Cadenza* for horn, clarinet and piano I could find little but self-conscious posturing and rhetorical gestures.

The fibrous core that seemed to be lacking in all three new works was well to the fore in Avril Anderson's *The Grass Horp*, first performed in 1979. Indeed muscularity proved to be its leading virtue; the acidic combination of flute, oboe, clarinet and trumpet (an ensemble once contemplated by Webern) gives an incisiveness to the many layers of ostinato that make up the piece, though the promise in the opening pages of fierce new textures is never quite delivered.

The Mikado/Old Vic

B. A. Young

I saw this production at the Avon Theatre in Stratford, Ontario, 18 months ago, and it has been running on and off ever since. It is one of the prettiest Gilbert and Sullivan productions I have seen, played on a plain stage against a black background. Stagebands come on now and then to place some fresh bit of furniture, principally a set of low platforms of varying heights that can make a pathway for a stately entrance or display a soloist, and sometimes a more functional item like a bonsai tree grown to adequate size. The costumes, designed by Susan Benson, are the usual mock-Japanese in style, but richer and more graceful than we generally see. Miss Benson, with Douglas McLean also designed tha sets.

From time to time, the black is relieved by a superimposed pattern — a fan, that unfolds during the opening chorus to remind us what country we're in, some trailing garlands of flowers, or a big circle that is the sun when Yum-Yum sings of it, and magically turns colour to be the moon for the second verse of her song. There is no reference to the patterns of the Noh or Kabuki theatres; indeed, strictly speaking, the designs are not Japanese but D'Oyly Carte enriched, and the tumblers and Katisha's lion-dogs ere Chinese.

The company ere for the most part stronger at singing than at acting; the songs are tunefully sung, and the words are all clearly sounded, even if some of Gilbert's subtler jokes aren't attempted. John Keane as Nanki-Poo has a musical tenor, Marie Baron's Yum-Yum is all one would ask. The patter songs have been considerably re-written to include such topical subjects as the return of the Elgin Marbles; by the end of the week John Banks, who does these things, will doubtless have found a rhyme for GCHQ.

Tha most genuinely three-dimensional comedy playing is from Richard McMillan as Pooh-Bah, which is original and thoughtful. But he has let it go to his head, and even works away during ensembles and disturbs the equilibrium of Brian Macdonald's choreography, mostly so attractive. (Mr Macdonald is also the director.) Eric Donkin, as Ko-Ko, is another player whom I know as an actor; he is more restrained. He spurts out his patter-numbers nicely, and looks sweet singing "Tit-willow" from the bonsai tree. Avo Kittask makes a suitably impressive entry as the Mikado, and Christina James a suitably discouraging appearance as Katisha.

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The Airbus example

AIRBUS INDUSTRIE, which last week gave the go-ahead for the new 150-seat airliner, is sometimes seen as a model of European industrial collaboration. The consortium, in which France, Germany and Britain are the biggest partners, has won a respectable share of a market traditionally dominated by the U.S. Yet it is doubtful whether the formula can or should be applied to other sectors.

The manufacture of large civil aircraft, involving very high initial investment and a long payback, is exceptional even among high technology industries. Moreover the pooling of technical and financial resources, reinforced by government subsidy, has not solved the European industry's basic problem vis-à-vis the Americans—its low volume of production. Long production runs give the Americans, especially Boeing, economies of scale which are extremely difficult for the Europeans to match unless they can secure a sizeable share of the U.S. market. That is why the Airbus investment is so speculative and why the bulk of the funding has to come from governments.

The British and other European governments evidently want to preserve their civil aircraft industries for non-commercial reasons, but that is not an appropriate policy for industry in general. The objective should be not to substitute the judgment of governments for that of the market, but to create the conditions in which European companies can achieve the economies of scale necessary to compete internationally at a profit.

Opportunities

It is striking, for example, that in telecommunications—particularly public switching equipment, where European industry is relatively strong—the volume of intra-European trade is very low. Companies like CIT-Alcatel in France and Plessey in the UK have to look for exports outside Western Europe, competing against Japanese and American companies which have the benefit of large and homogenous home markets. The UK and France are discussing a partial opening up of each other's markets, but the prospects look much more promising in the U.S., where the break up of American Telephone and Telegraph has created new opportunities for equipment suppliers.

The fragmentation of national markets is aggravated by the tendency for European governments to foster "national champions," whose commercial freedom is constrained by considerations of national prestige. Thus Olivetti in Italy and Philips in Holland find it easier to forge links with AT & T than, say, with a French nationalised concern which is inevitably subject to government pressure.

Initiative

This combination of factors, together with the push into Europe by IBM, AT & T and others, has revived fears of technological dependence. One of the responses has been to stimulate inter-company co-operation in research, partially funded by governments. The recently-launched Esprit programme, covering research into advanced computers and other forms of automation, is seen as an important Community initiative in the field. But co-operative research will be of little value unless the products thet result from it have access to a large, open market.

The emphasis of industrial policy in the Community needs to shift from big companies and big projects towards identifying those industries which promote technical advance at all levels of industry. They include harmonisation of technical standards, removal of administrative barriers to trade, encouragement for venture capital and increases in the supply of skilled manpower. The aim should be to create not a European counterweight to IBM, but an environment in which innovators of every shape and size can flourish.

A more open, competitive European market in high technology industries would upset powerful interest groups which are used to a privileged relationship with their home governments; defence procurement, an important source of technological advance, is an obvious case in point. Chipping away at these barriers to trade is less glamorous than investing in airliners, but the returns are likely to be higher.

Brazil's choice of president

BRAZIL'S presidential elections are not due until January 1985. On paper this still gives President Joao Figueiredo a reasonable run to implement the economic policies agreed with the International Monetary Fund last December.

However, the knowledge that he is on the way out and suffering from ill health has begun to create the impression of a lame-duck administration. President Figueiredo seems to have lost the stomach for firm government and this has intensified the pre-electoral politicking in which he too is embroiled.

Given that the presidential elections will determine the path towards a full return to democracy, it is natural that the country should now become absorbed in its own political affairs. The elections are after all an essential element in the military's plan gradually to hand over to the politicians the control which they assumed by their intervention in 1964.

Nevertheless, the international banking community, to whom Brazil owes more than $90bn (£60.8bn), can scarce observe this process with total ease. For if the Figueiredo administration becomes too paralysed by the elections, then Brazil's capacity to implement the IMF programme (on which in turn commercial bank lending hinges) is bound to be affected. As it is, the inflation figures for the first two months of the year are far higher than expected; and this could jeopardise the achievement of the first quarter targets.

Original aim

While Brazil deserves a measure of understanding from its international creditors as it tries to sort out its political future, the country's politicians—and the military who still sit in judgment behind them—can also help. At this stage the single most important issue to clarify is the electoral process itself.

The original aim was to let the new president be chosen from the 668-member electoral college in which the ruling Partido Democratico Social, PDS, has a built-in majority. Electing the new president would have been a relatively smooth process provided that the PDS could agree on its candidate. However, the ruling party is badly split and there is no majority backing for any one candidate.

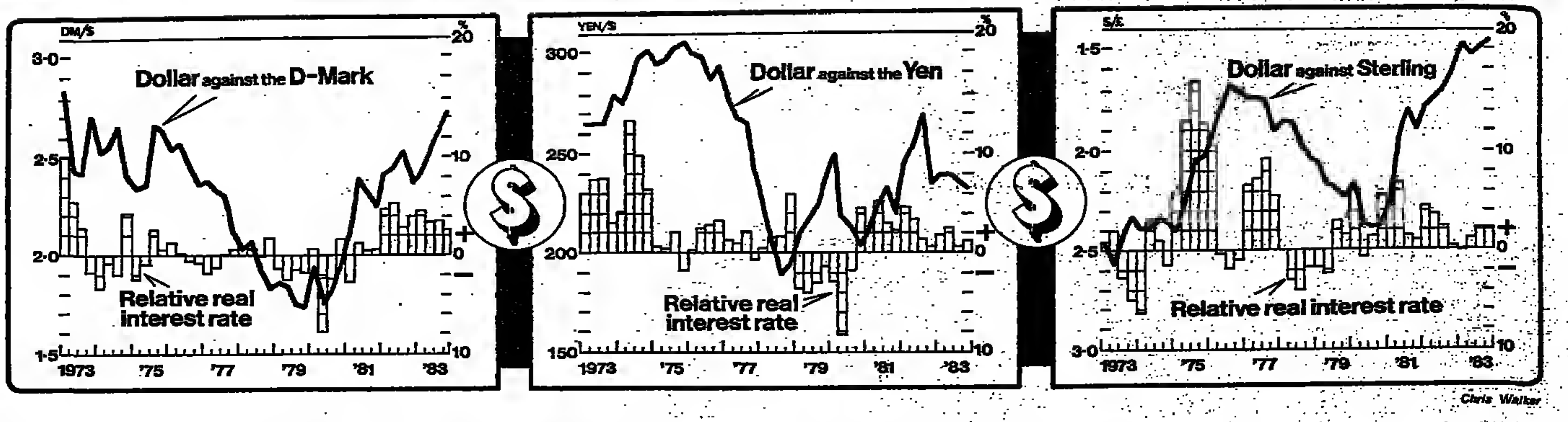
The divisions are more about personalities than policies; but there is also a genuine difference between those who wish to see someone keep all the old party apparatus in place and those who want a candidate with a fresher image. At present the frontrunners are Sr Paolo Maluf and Sr Mario Andreazza, both of whom fit into the former mould. Yet a strong minority, including several state governors, has swung behind the candidacy of the current vice-president, Sr Aureliano Chaves.

Vociferous

Sr Chaves, realising that his presidential hopes are limited under the existing rules, has come out in favour of direct elections that would by-pass the electoral college. His espousal of direct elections has added a weighty voice to the opposition's increasingly vociferous campaign against the electoral college.

There is nothing to stop President Figueiredo accepting legislation which changes the electoral procedure. He could get such legislation through Congress but there might be a tough battle in the Senate. More importantly, he risks upsetting his own generals who endorsed the "indirect election" procedure as part of the gradualist return to democracy. The military's main fear is that direct elections could encourage anarchic populism of the very kind that provoked their intervention 20 years ago. They also look askance on the prospect of a left-wing candidate succeeding—a possibility which cannot be excluded given the pretensions of the governor of Rio de Janeiro, Sr Leonel Brizola. Last week the military publicly voiced their concern over events getting out of hand.

So far the Brazilian authorities have handled the process of "abertura," the opening up of democracy, skilfully and well, despite the strains arising from the country's economic crisis. It may be that to speed up the process by opting for direct elections next year would create more problems than it solves. But the President needs to act quickly and decisively to end the present uncertainty, which risks polarising the political debate to a dangerous degree.



Chris Walker

When the dollar loses its shine

The real fear is that the dollar could suffer a rout, with possibly disastrous consequences for interest rates, inflation and growth in the U.S., which could spill over into the rest of the world, writes Anatole Kaletsky

AFTER strutting across the front pages for three years as International Public Enemy Number One, the mighty U.S. dollar appears to have been ambushed at last by the world's foreign exchange dealers.

The dollar's assault on the DM 2.85 level in January was simply too audacious and the subsequent retreat of nearly 10 per cent in the dollar-D Mark exchange rate has exposed the U.S. currency's vulnerability. If the dollar falls convincingly through its next resistance point at around DM 2.58, the turn in market sentiment could be decisive and long lasting.

Yet there are few signs of rejoicing about the dollar's fall in the central banks of Europe and Japan, and even less jubilation in the world's stock markets. From Tokyo to London, share prices have fallen "in sympathy" with the setbacks of the dollar and Wall Street.

This may seem odd since the strength of the dollar has been blamed repeatedly in recent years for decisions to tighten monetary regimes in West Germany, Japan and France. And the lure of America's ever-rising currency, backed up by its high interest rates, has been denounced repeatedly at international economic summits for starving the world's other economies of funds.

But now that the surge in the dollar may be about to reverse itself, it is much less clear cut than it appeared at Versailles or Williamsburg whether a weaker dollar will aid world economic recovery or obstruct it.

The current bout of worldwide nervousness about what life may be like with a weaker dollar is more about the style of the dollar's decline than about the fact that it is falling. It is still generally believed that a weaker dollar will reduce inflation rates in most countries because it will bring down oil and commodity prices.

To the extent that this is true—and experience of the past few years suggests that the dollar prices of most commodities and even oil are fixed only in the short term, before they adjust to movements in the dollar's exchange rate — the decline of the dollar could increase growth rates in some countries by leaving more headroom for real activity within any particular monetary targets.

But nowhere in the world would a weaker dollar be an unmixed blessing.

For Japan and the Pacific Basin it could mean a big drop in exports or, more likely, in exporters' profit margins. For Europe, which does much less direct trade with the U.S. than Japan, a lower dollar would still mean tougher competition from U.S. companies in third country markets. For the struggling debtors of the Third World, the dollar-denominated debt burden would be reduced, but so would the rewards from burgeoning exports to the U.S. market, while imports, which come predominantly from Europe and Japan would become relatively more expensive.

Ironically, France, which has been the strong dollar's most vociferous critic, could find its leeway to cut interest rates restricted even further now that the dollar is falling. For the government must prevent the franc falling against the newly-popular D-Mark within the European Monetary System. In Britain, by contrast, the dollar's decline could facilitate lower interest rates, since the government may welcome the pound weakening against the European currencies, while maintaining its parity against the dollar.

However, the worries about recent events in the foreign exchange markets do not concern such quibbles. The real fear is that instead of a gradual "soft landing," the dollar could all too easily suffer a rout, with possibly disastrous consequences for interest rates, inflation and growth in the U.S., which could spill over into the rest of the world as happened after the dollar's 21 per cent fall against the D-Mark in 1978-79.

If assessing these fears about a collapse are justified it is not enough merely to observe that the U.S. currency is vastly overvalued—33 per cent higher, in fact, than its average value between 1973 and 1979 against the currencies of U.S. trading partners, adjusted for inflation. If this is indeed the beginning of the long-awaited bear market in dollars, the key to future developments must lie in the new trend's causes. A search for these must start by admitting that there is, in a sense, no such thing as an over-valued currency in a world of floating exchange rates and free capital movements.

The dollar settles each day at whatever level will persuade investors, speculators and central bankers (if they choose to intervene in the currency markets) to buy the surplus dollars offered the world that day as e result of the U.S. current account deficit.

The first canard to bury is that the world could refuse to finance an excessive U.S. current account deficit, for however many dollars there are on offer, somebody will buy them. If there are not enough buyers at DM 2.60, then the dollar will drop to DM 2.59 or whatever level is required to square that day'a dollar demand and supply.

This daily exchange rate obviously depends on two factors—the return available on dollar securities and the size of the current account deficit which has to be financed. There is another equally critical influence—the balance of expectations among investors about which way the dollar will move next. This third, psychological, factor is affected by the level of interest rates—particularly its real interest rates, adjusted for inflation (as shown in the charts)—and by the prospects for the current account.

It can also develop a life of its own, particularly if perceptions about a country's inflation or its political stability deteriorate. As we shall see, this third factor of "confidence" is not, in the present circumstances, as vague and question-begging as it may appear at first sight.

Until a month or two ago it was generally assumed that the rise in the dollar would eventually be reversed by a decline in U.S. interest rates. The most optimistic projection was that interest rates would fall as a result of actions to cut the federal budget deficit.

Failing this, it was hoped, most notably in the Federal Reserve Board, that the U.S. economic recovery would gradually slow down from its torrid annual growth rate of 6 per cent during 1983 to somewhere nearer 3 or 4 per cent.

This slackening would bring down interest rates, while raising the pressure on politicians to address the budget deficit issue after the November elections. The dollar would fall in response but only gradually, since the slower growth and prospect of budget action would reduce the magnitude of the current account deficits which had to be financed in the future and would reinforce confidence in the U.S. economy.

Perhaps the single most unsettling development of the past few weeks for the foreign exchange markets is that this popular scenario for a "soft landing" has been turned on its bead — the dollar has fallen as U.S. interest rates have risen and fears about the budget deficit have grown.

Thus the markets are being forced to consider the second possible explanation for a fall in the dollar—the level of the current account which will need to be financed in the years ahead is being pushed up by the strength of economic recovery.

Furthermore, the persistence of high real growth rates is starting to push the economy up against its capacity limits, creating the conditions for a new upsurge of inflation—and this inflation will make U.S. goods even more expensive relative to foreign ones, sending the current account still further into deficit, unless the dollar falls.

Until recently the possibility that tha dollar could fall as a result of excessive economic growth did not cut much ice in the foreign exchanges because of a vital caveat. The conventional wisdom held that if an expansion did threaten to get out of hand, the Fed would promptly slap it down with higher interest rates.

This Fed action in turn was expected to drive up tha dollar—which is why throughout last year the foreign exchanges perversely bid the dollar up on news of high inflation and economic growth figures, while they sold the dollar when they saw inflation and growth declining.

The scary scenario which is now beginning to stir the financial markets is that this caveat may turn out to be wrong—the Fed may be unwilling or unable to brake the growth of the U.S. economy. And if the Fed does fail to act, the excessive growth explanation for the dollar's fall may not merely be validated—it may turn into the third explanation—a self-perpetuating loss of confidence.

For any fall in the dollar will give an upward twist to inflation—a 10 per cent fall in the trade-weighted dollar index raises U.S. consumer prices by about 1.2 per cent over two years, according to the OECD. It will also tend to accelerate the economic growth rate by stimulating the export sectors which have so far been in the doldrums. The growing concern about inflation, meanwhile, will exacerbate further the market's expectation that the dollar will continue to fall.

As this pressure mounts, the Fed and the markets will reach a moment of truth. If the Fed fails to tighten the monetary screws sufficiently, it will lose its credibility as the sole bulwark of the U.S. economy against inflation and the fall in the dollar could turn into a collapse. If it tightens too much, it may undermine the incipient recovery of business investment which is the most hopeful development to have occurred so far in the U.S. economy; it will squeeze the Third World debtors further and they are already showing renewed signs of inability to meet their IMF guidelines; most important of all, it will risk making monetary policy a key electoral issue and hand the Presidency to a Democratic candidate who will almost certainly be even more unsettling to financial markets than Ronald Reagan, at least in the early phase of the new Administration.

Thus, the Fed faces more constraints than at any time in the past three years but the nervous foreign exchange markets could do more than limit its room for manoeuvre—they could make it non-existent. For even if the economy is not actually growing so rapidly as to set the Fed's alarm bells ringing about inflation, the markets may believe that it is—and behave in such a way as to fulfil their forebodings.

Once a downward trend in the dollar becomes firmly established in market psychology, it will require substantially higher interest rates to keep the currency at any given level. For example, it may need a Federal Funds rate of 15 per cent to keep the dollar at DM 2.60 if the market expects the dollar to fall, when an interest rate of 9.5 per cent was sufficient to sustain this exchange rate when the dollar was rising. Thus, once bearish expectations catch on in the foreign exchanges, the Fed could be forced to choose between tightening monetary policy in an economy which is slowing anyway or allowing the exchange rate and inflationary expectations to run away.

Obviously both these alternatives would be grim ones for the U.S. economy. But the first would be worse for the world as a whole if it involved a major increase in U.S. interest rates. It is still most likely that a choice as stark as this will not actually present itself, if the foreign exchange markets have second thoughts about the dollar's weakness somewhere on the way down to DM 2.40 or so.

But if a choice does have to be made, a speech last week by Mr Martin Feldstein, the President's outspoken chief economic adviser and Mr Paul Volcker's closest ally in the Washington political structure, seemed to suggest that the Fed would err on the side of "benign neglect" of the exchange rate. Tightening monetary policy would be "undesirable" to prevent a fall in the dollar which was "inevitable" in any case, Mr Feldstein said. So it looks like the dollar will remain at the mercy of the markets on the way down, as it was on the way up.

Men and Matters

Shipbuilders' new salesman

Nobody looks more thoroughly at home in the burly-burly of the shipbuilding industry than Ken Chapman, the tough, fast-talking 44-year-old, one-time apprentice, who runs Swan Hunter.

After a year as head of the Tyneside yard, Chapman will soon be taking on one of the industry's most challenging jobs—running the new product development and marketing department to be set np by British Shipbuilders.

State-owned BS, staggering under huge losses and desperate for more business, is being streamlined by its recently appointed chairman, Graham Day. Chapman's job will be to come up with the right products and sales strategy to weather the barsh conditions of the industry.

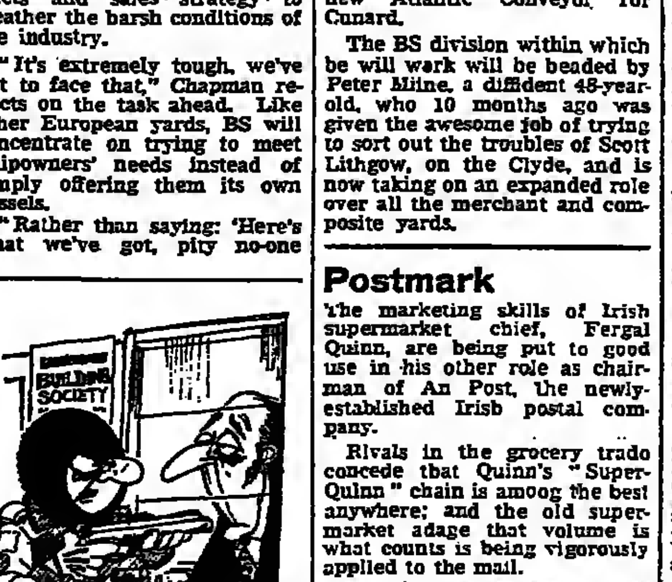
"It's extremely tough, we've got to face that," Chapman reflects on the task ahead. Like other European yards, BS will concentrate on trying to meet shipowners' needs instead of simply offering them its own vessels.

"Rather than saying: 'Here's what we've got, pity no-one wants to buy it,' we've got to study the needs of the market and act more as a transportation consultant, asking shipowners: 'What do you want to move, how and where?'"

Managing Swan Hunter, one of the largest and most complex of the BS yards, is something be has "enjoyed thoroughly — there'a a huge potential bere."

Chapman will still be deputy chairman of the composite (naval and merchant ships) yard where he bas striven to boost productivity and overcome delays on building the new Atlantic Conveyor for Cunard.

The BS division within which be will wark will be beaded by Peter Milne, a diffident 48-year-old, who 10 months ago was given the awesome job of trying to sort out the troubles of Scott Lithgow, on the Clyde, and is now taking on an expanded role over all the merchant and composite yards.



"...and don't give me that sob story about having to get rid of short term gilts."

Postmark

The marketing skills of Irish supermarket chief, Fergal Quinn, are being put to good use in his other role as chairman of An Post, the newly-established Irish postal company.

Rivals in the grocery trado concede tbat Quinn's "Super-Quinn" chain is amoog the best anywhere; and the old supermarket adage that volume is what counts is being vigorously applied to the mail.

Quinn's first wheeze was a penny post on January 1, when An Post took over from the old Post Office. Now he has called on the Irish patron saint to belp encourage people to use the service.

St Patrick's Day is March 17—and An Post is offering greetings cards for an all-in price of 25 Irish pence, postage paid. Not a bad bargain when the price of a first class stamp is 26 Irish peoce.

The trick seems to be working. There bave been long queues at many post offices and some have run out of cards.

Citibank alumni

Just as British industry seems to be full of managers who once worked for Ford, so the City of Loodon seems to be liberally sprinkled with bankers who spent their formative years with the aggressive New York giant, Citibank.

Among those who spring readily to mind are Michael von Clemm, chairman of Credit Suisse First Boston; Bob Logan, chief executive of Grindlays; John Hyde, chief executive of the Charterhouse Group; and Peter Alexander, European bead of Chemical Bank.

The Duke of Argyll is an ex-Citibanker; so is John Montgomery, Clerk of the Salters' Company; and Richard Wheeler-Bennett, chairman of Thomas Borthwick, the meat group.

With at least another 200 or so working in or around the City, little wonder that moves are afoot to form an old boys' association — the Citibank alumni.

The venture is being organised by Stanley Howell, lately general manager of Chemical Bank, and now geoeral manager of Centerre Bank. Howell spent 18 years with Citibank both in Britain and New York.

"The idea," he tells me, "is to form a club that would hold two or three social events a year." There has been an enthusiastic response from those old boys be has contacted so far, and he is anxious to bear from more.

Von Clemm has offered to design the club tie; and Citibank, itself, has offered to pay for an inaugural dinner and send over a senior man from New York to give the club its official blessing.

Old times

Brokers, it appears, have not always enjoyed the reputable position in the City establishment that they hold today.

Sir William Rees-Mogg, former Times editor—and one-time Observer for this column—has come across several nefarious examples in what has clearly been the enjoyable task of cataloguing a series of rare 17-century criminal news pamphlets for his antiquarian bookshop, Pickering & Chatto.

The sheets were the precursors of the sort of news reporting for which the News of the World (not The Times) was later to become famous. They sell for £150-£450 and, says Rees-Mogg, are of scholarly interest not only as early journalism but for the insights they give into the law and social habits of the times.

It is with the delight of an old City reporter that he lists, for example, the account of the "tryal and condemnation of Frost the Broker" in 1675. Not content with charging interest at a weekly rate of three shillings in the pound, Frost tried to make more profit by clipping and filing "His Majesties coyn" and ended on the gallows.

"Now Brokers all a warned be, Here is your Brother condemned you see," a balladeer wrote on his passing.

Rees-Mogg'a old editorial hand is also discernibia in the commentary on the account of the trial of rioting apprentices in 1668. Sir John Kelyng, Lord Chief Justice, opined at the time that "If a Company of People will go about any Publick Reformation, this is High Treason."

"Long may it remain so," adds Rees-Mogg, echoing many a Times leader.

Sound opinion

Glasgow graffito: "Listening to the bagpipes is e fate worse than deaf."

Observer

FOREIGN AFFAIRS: EUROPEAN DEFENCE

The Kissinger recipe

By Ian Davidson

LAST WEEK, in an extended essay in Time Magazine, Dr Henry Kissinger set out a detailed plan for the rebalancing of the Atlantic Alliance, with the Europeans taking more responsibility for their own defence. At this level of generality, the idea is anything but new — it goes back several decades — and is indeed becoming a generally fashionable topic of study by analysts and of public pronouncement by the more imaginative European politicians. Yet the Kissinger essay raised a mini-storm of disapproval from Brussels to Bonn and back again.

This is slightly puzzling. No one can seriously deny that the Alliance faces an accumulation of structural problems, military, financial and political, and only the most complacent would argue that these problems can be dealt with by shuffling them under the carpet. One might imagine that a contribution to the debate by a statesman with as much experience of the international scene as Henry Kissinger would call for deliberate consideration. But no; dismissal has been instant and sweeping, from the German foreign ministry, and from the civilian and military leadership of Nato.

Admittedly, many of the specifics of the Kissinger plan are debatable: some may be inherently misguided; others, if desirable, may be impracticable at least in the current state of Europe's development. But there can be no doubt that he means well; his recipes may or may not be the right ones, but at least his objective is to strengthen the Atlantic Alliance, and to avert a situation in which trans-Atlantic stresses could lead the Americans to careen off in the direction of neo-isolationism or global unilateralism.

I suspect that the immediacy of the dismissal of the Kissinger ideas has something to do with the fact that he is an American. When President Reagan proposed the development of space-based systems to ward off the danger of nuclear attack, he was widely denounced, both in Europe and in America, for indulging in a dangerous "star wars" fantasy. But when President Mitterrand, a few weeks ago, floated the idea of a European manned station in space to "thwart any potential threat," Europe's politicians and strategists remained absolutely calm, not to say indifferent.

When American spokesmen urge the European allies to step up their spending on conventional defence, to re-examine the entrenched strategy of forward defence, or to invest in hi-tech conventional weapons, as a substitute for tactical nuclear weapons, the Europeans complain that they are being got at. Yet among the French, of all people, it is now becoming acceptable to raise the long-taboo notion that there needs to be a change in the relationship between West Germany and nuclear weapons.

It is Jacques Chirac, no less, the leader of the Gaullist party, who has said that this problem needs to be addressed; how he does not claim to know, but somehow or other, he believes, it must be addressed. And quite recently a French socialist deputé, writing in Le Monde, argued that, as part of a move towards a more united European defence posture, the Germans should have dual-key control of some of the French nuclear weapons.

As between the two orders of ideas, stronger conventional defence and a re-opening of the German nuclear question, there should be no doubt which ought to be the more explosive in political terms, and which is more pressing in security terms. Yet it is the Americans who are perceived, because of their dominant position in the Alliance, as the trouble-makers; and also, of course, because America today is associated with Reaganism, with all that that entails in unpredictability and global activism.

Nevertheless, the Kissinger ideas do deserve serious examination. And they deserve it all the more if it is true, as some suggest, that the good doctor still entertains hopes of returning to high office in Washington, perhaps in his old post of Secretary of State in a second Reagan administration.

Kissinger identifies two broad categories of problems in the alliance: the first military and doctrinal; the second political and economic. The military problem is that Nato's inadequate conventional forces make it precariously dependent on nuclear weapons; yet nuclear parity drains this posture of much of its credibility, and therefore seriously undermines public support for Nato doctrine. The politico-military problem is that, although Europe is much richer than the Soviet Union and potentially as rich as the U.S., it manifestly refuses to equip itself with an adequate conventional defence; yet at the same time it whines at the consequences of its dependence on American nuclear weapons and at the wilfulness of American leadership.

There are mitigating reasons for this undignified European posture, first among which is the special status of Germany. At their own choice, and at the insistence of their neighbours, allies and enemies, the Germans have renounced nuclear weapons; in the nuclear age this makes them ultimately dependent for their security on the nuclear deterrence provided by the American super-power.

Germany's dependence on America has been made even more difficult by the Gaullist legacy. Twenty years ago, de Gaulle resisted might and main the American attempts to shift Nato strategy away from the massive nuclear retaliation, in the event of a conventional Soviet attack on Europe, towards what came to be called "flexible response"; the U.S. believed this would restore credibility to the nuclear deterrent in Europe; de Gaulle believed it would further undermine it.

Many of the specifics of the Kissinger plan are debatable

For five years his resistance was successful. When it finally failed, he withdrew France from the integrated military structure of Nato, and based French defence policy on the principle of total independence, both nuclear and conventional. Deprived of the French hinterland, geographic, military, logistical and political, the defence of Germany became even more dependent on the American alliance.

The trouble is that this dependency no longer provides reassurance. It may well be true, as most serious analysts claim, that the alliance still provides a secure and stable deterrence against a deliberate Soviet attack; if there are holes in the credibility of the nuclear doctrine, yet still a Soviet aggression would face horrific risks. Nevertheless, it is clear, from the controversy in many European countries, that many people do not feel confidence in the security posture.

Kissinger's answer to the problem is that henceforth the Europeans must assume greater responsibility for their own defence. It is idle for the Europeans to retort that they already provide 90 per cent of the ground forces and 80 per cent of the tanks and aircraft. The plain fact is that they spend much less on defence than the Americans, and it is they who are unhappy about the security situation. In any case, Kissinger is not just mouthing the old incantation about defence budgets; he is arguing that it is time the Europeans decided what kind of defence they would be happy with: as a corollary, the post of Supreme Allied Commander in Europe should be transferred from an American to a European general.

His preferred outcome would be that the Europeans would decide they wanted a stronger conventional defence, so as to reduce dependence on nuclear weapons, and would agree to provide it, in conjunction with an American contribution broadly on the present scale. But if the Europeans decided that they were unable to tackle the nuclear dilemma by providing a stronger conventional defence, then in *that* case the U.S. should act in accordance with a doctrine of nuclear dependence by withdrawing up to half its ground forces.

European responsibility for European security should also extend to arms control, according to Kissinger. The MBFR conventional force negotiations, which reconvene in Vienna next week, and the Euro-missile negotiations which were broken off late last year, are both mainly about European interests; in both of them, therefore, the leading role should be transferred to the Europeans.

It is easy to pick at many of the specifics of the Kissinger plan. The MBFR negotiations, for example, are already handled on the western side on a multilateral Nato basis; and in the case of the Euro-missiles, it is hard to envisage the Europeans moving from an influential to a determining role in the control, and therefore the deployment, of nuclear weapons which belong to the U.S., and where any treaty must be ratified in the U.S. Senate. Even in MBFR, to give the Europeans an overtly decisive voice would virtually give them a decision-making power over the deployment of American troops in Europe. The Europeans already play an influential role in both negotiations; it is hard to see how this role could be much enlarged without raising profound constitutional issues in Washington.

Secondly, it is hard to see the advantage to the U.S. of withdrawing half its ground forces in Europe if the Europeans fail to strengthen their conventional defence effort appropriately. If the Americans share Dr Kissinger's doubts about the credibility of Nato's nuclear doctrine, or fear the probable consequences for themselves if it were ever called into play, it may be rational to reconsider the whole of their defence commitment to Europe; it must be much less rational deliberately to engineer a critical weakening of the conventional balance such as might encourage the Russians to try their luck at a purely conventional attack.

Nevertheless, the underlying thrust of the Kissinger thesis is almost incontrovertible. There is no objective reason why European governments should not provide the kind of defence effort, at least in the conventional field, with which they and their electorates would be comfortable. If they don't like the present situation, whether it comes from dependence on nuclear weapons or from dependence on Reaganism, then they should do something about it. If new strategic thinking and the opportunities provided by hi-tech point towards a shift from nuclear to conventional weapons, by definition that should imply a corresponding shift from dependence on the U.S. to a greater degree of self-reliance.

It will be objected that a greater degree of European self-reliance is inhibited by national sovereignties, national traditions and national politics. In the economic sphere, these are the excuses trundled out to justify the petty protectionisms of national rivalry which have stalled the development of the European Community, in spite of the pressing imperatives of the economic crisis which have called for different attitudes ever since the first oil shock a decade ago. But if Europe's security is at stake, the weasel words will no longer do.

The French seemed to have recognised the nature of the problem; the Germans are wrestling with uncomfortable reality; the British pretend there is no problem, largely because Mrs Thatcher does not really accept that Britain is part of Europe. Henry Kissinger's recipes may be all wrong; but it is a fair bet that, when European Community leaders meet in Paris in June, President Mitterrand will press the debate about European responsibility for European security one step further forward.

Dr Kissinger: set out detailed plan

Lombard

A question of intelligence

By Michael Dixon

UNLESS university-trained women and graduate men get together and produce more babies Singapore's living standards will fall, says Prime Minister Lee Kuan Yew. He believes that the tendency of the highly educated to breed less than their academic inferiors is a mechanism for reducing the country's average level of intelligence, so causing economic and social decline.

While it is no longer stated publicly by our political leaders, the basis of the same belief persists in western societies. It is true that those claiming, like Mr Lee, that genetic inheritance is the main source of intelligence are opposed by groups such as Marxists who say the source is the social conditions in which a child is brought up. But both camps mostly share two more fundamental assumptions.

One is that there exists a thing called "general intelligence" possessed by people much as they have the power of sight or hearing. The second is *that how much "g" intelligence* we have is reflected by our performance in academic education.

Among professional psychologists, however, these assumptions are a matter of sharp controversy. Numerous psychologists do believe in the single "g" property on the basis of their statistical interpretations of countless intelligence tests. But probably an equal number argue, on the evidence of different interpretations of the *same tests, that there is not just* one but several different kinds of intelligence.

Since neither side's statistical approach is demonstrably more scientific than that of the other, the controversy seems unlikely ever to be resolved so long as its raw material is the result of psychological tests, usually of the pencil-and-paper type. But a four-year study at Harvard University has led to an attempt to break out of sterile arguments. It is described in a book just published in Britain written by Dr Howard Gardner.

He is a psychologist, trained in one of the strictest versions of the single-intelligence convention, who went on to divide his research activity between victims of brain damage on the one hand, and normal and gifted children on the other. "I soon saw that what I'd been trained to believe conflicted with what my research was showing," he says.

He has studied the evidence, not of psychological testing, but of actual examples of intelligent activity in various cultural settings. The aim was a *coherent explanation of the* whole gamut of human skills. To fit his definition of intelligence an ability had to satisfy several hard criteria. For example, it had to be one which is wiped out by damage to some identified part of the brain.

He has concluded that there are seven different intelligences.

Three are of a sort whose development is encouraged by the academic curriculum in Britain. They are: skill with words; skill in logico-mathematical reasoning; and what he terms intrapersonal intelligence: the ability to reflect mentally on one's own make-up and emotions and act accordingly. A fourth, musical intelligence, is also fostered in many schools.

But the rest are only marginally developed by conventional academic studies, and sometimes not at all.

Spatial intelligence—ability to visualise how the parts of complex things fit together and interact—is crucial in engineering design, for instance. A sixth, bodily intelligence, underlies skill at communicating in mime, gymnastics and so on. Lastly "interpersonal intelligence" enables us to understand other people's situations and act appropriately.

While all seven are probably *inherited* as *potentialities*, Dr Gardner says, each is likely to atrophy unless its use and development is encouraged by society. Hence the British and other peoples who concentrate their education on at most four, are liable to become more and more computer-like and self-centred while losing their practical creativity and ability to get on with one another.

We, as well as the Prime Minister of Singapore, perhaps ought to think again.

Frames of Mind. William Heinemann; £18.

Letters to the Editor

A hidden tax on water

From the Chairman, Water and Effluent Panel, Confederation of British Industry.

Sir,—In your article on the Thames Water Authority (February 22), in which you discussed the cuts planned in the workforce, you quoted certain figures for the authority's costs and prices, but you failed to bring out the key issue revealed by these figures.

Thames Water Authority plans to contain its operating costs in 1984-85 to £287m, an increase of £5m or less than 2 per cent over the current year.

Its charges, however, will increase to a much greater extent. Industrial water and effluent charges will increase by 4 per cent to 7 per cent and household water bills by about 7.5 per cent.

The need to raise charges to a greater extent than the increase in operating costs arises from the constraints on external financing limits and return on assets which are placed by the Government on the water industry. These constraints are highly complex and are in effect a hidden form of taxation on water.

Water and sewage are most basic needs of the community. It is completely wrong for them to be subject to any form of taxation. The Government and the water industry should take immediate steps to order their affairs in such a way that taxation of water services does not occur.

A. R. Guy.
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Lovers of Elgar

From the Secretary, The Elgar Society.

Sir,—Once can be ignored as a mistake, but twice does call for comment! Recently your distinguished critic Dominic Gill expressed his dislike of Elgar's music in clear terms before proceeding to give a favourable review of the performance. In your edition of February 24, Max Loppert pursued a similar theme although I detect his dislike of Elgar's music is not so acute as Gill's.

Having been closely involved in arranging the concert in the Royal Festival Hall to commemorate the 50th anniversary of Elgar's death, it is particularly galling to read a criticism of the concert which spends most of its length complaining about the "anniversary" machine. To suggest that we are a backward-looking culture because lovers of Elgar's music wish to celebrate his life and work is preposterous. What future is there for our culture when we listen to Bach or Mozart? No, Mr Loppert has got it wrong. He may on the other hand be very lucky. He suggests that the "Grania and Diarmid" music is not "really a rarity" and "the second Wand of Youth Suite" "is the regular stuff of South Bank Elgar concerts." Well I have never heard them live before and would therefore be delighted to know what I have been missing!

The truth is Mr Loppert is not in sympathy with what was being attempted. Lovers of a particular artist can be criticised for an over-indulgence in their love, but to fill a London concert hall in this economic climate is no mean feat; which either suggests that the public is irretrievably atavistic or may perhaps, occasionally, enjoy listening to the work of a great artist and to celebrate his life by honouring the anniversary of his death.

A. H. A. Neill.
11, Limburg Road, SW11.

North Sea oil and gas costs

From Mr T. Cox

Sir,—Mr G. A. Mackay (February 28) questioned the implication of your February 20 report on North Sea oil and gas costs. To put the record straight our Press release said: "The indices show that offshore development costs are being contained i.e. the development cost per barrel of oil is not increasing at the rate level observed from 1971 onwards." The figures quoted by Mr Mackay support this conclusion in that the figures he quotes show limited increases over the four years selected. Nevertheless, the costs we refer to are the capital costs of development and do not include any element of operating cost or debt service cost.

T. F. Cox.
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Tax avoidance, the law and an infringement of freedom

From Mr M. Stannard

Sir,—Your editorial "Tax avoidance and the law" (February 22) says that "in Furniss v Dawson" [illegible] that the decision must be welcomed. With respect, sir, I beg to differ. The British attitude towards tax and its avoidance has always been based on the principle that (1) "Taxes are imposed on subjects by Parliament. A citizen cannot be taxed unless he is designated in clear terms by a taxing Act as a taxpayer and the amount of his liability is clearly defined," and (2) "No man in this country is under the smallest obligation, moral or other, so to arrange his legal relations to his business or his property as to enable the Inland Revenue to put the largest possible shovel into his stores."

Accordingly, Revenue and taxpayer have always worked on the basis that if a loophole exists, it may be exploited until Parliament can be persuaded to close it. Parliament in this country has never seen fit to legislate (as has, for example, the South African Parliament) except in certain cases such as those concerning transactions in securities to permit the Revenue to assess a citizen merely because he has taken artificial and non-commercial steps to minimise his tax liabilities. In the line of cases starting with W. T. Ramsay v IRC and ending with the Dawson case, the House of Lords, by adopting its self-confessed "new approach" has apparently "usurped" the authority of Parliament by effectively inserting the new principle into English law, namely, that for a transaction to be effective fiscally there must be a "business purpose."

Until the practice statement of July 1966, the House of Lords was totally bound by its own previous decisions, an Act of Parliament being considered to be required to reverse the effects of a Lords' decision.

This process of legal development can therefore be said only to have replaced the certainty which previously existed. The existence of the "step by step" approach has been removed and has been replaced by the greater certainty that the Revenue will seek to exploit every opportunity to take cases to the House of Lords in order to have the "new approach" extended to its advantage. Since the average taxpayer lacks either the enthusiasm or the money to have his name inscribed in the appeal cases, the Revenue has been put in an unparalleled position of forcing most contentious cases into unconditional surrender.

Since the House is no longer bound by its own previous decisions and has demonstrated its willingness in tax cases to depart from principles of some thirty years standing by swinging in favour of the taxpayer (as in Vestey) or in favour of the Revenue (as in Ramsay), taxpayers are likely — with some justification — to assume that at some stage the House of Lords will, as it did in the Vestey case, realise that it has been led to the edge of a precipice and beat a hasty retreat on to firmer terrain. The latest decision is therefore going to serve to increase the confusion which has existed in the administration of taxation since Ramsay and, in all probability, to increase substantially the number of respectable citizens who will resort to criminal evasion of tax.

The further inevitable consequence of the House's decision in Dawson is that the case will be called in aid by analogy in other cases, fiscal and non-fiscal. Obvious examples, to name but two, concern the allotment of securities by way of renounceable letter (the sole function whereof is stamp duty avoidance) and the creation of numerous types of leases which only make economic sense by virtue of the granting of capital allowances. Businessmen taking steps which have no commercial reality save to circumnavigate some legal restriction should not in my view be surprised to find themselves confronted with a Dawson-type argument. In particular, one wonders at what point a prosecuting authority will seek to found a criminal charge on the basis of a transaction containing no business purpose but seeking to circumnavigate the letter of the law by what would, but for Dawson, be considered to be legal means.

Does not the "new approach" infringe the provisions of the European Convention for the Protection of Human Rights and Fundamental Freedoms? That provides that "every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law. The preceding provisions shall not, however, in any way impair the right of a state to enforce such laws as it deems necessary to ... secure the payment of taxes ..." Since the "new approach" has obvious retroactive effect applying as it does, to transactions such as those in the Dawson case which took place in 1971, it must be regarded as unfortunate in the extreme and it is to be hoped that the House sees the edge of the precipice and retreats to firmer ground.

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FINANCIAL TIMES
Monday March 5 1984

Terry Byland on Wall Street

Drugs and the dollar headache

THE FIRST two months of 1984 will not be lightly forgotten on Wall Street, even if the stock market was beginning to show signs of coming up for air by the end of February.

All the factors seem to have been bear ones for the past eight weeks. But what is bad for some sectors can be good for others, and it may be time to start looking for the silver linings, especially if the whole market is beginning to look a shade steadier.

The wave of uncertainty over the outlook for the dollar, for example, has already started to benefit some of those stocks in companies which have been struggling for so long to sell their products in overseas markets.

The major pharmaceutical groups, whose success in developing their domestic opportunities was offset by their vulnerability to the effects of a strong U.S. dollar, have strongly outperformed the rest of the industrial stock market since the turn of the year.

The pharmaceutical majors take between a third and a half of their sales from outside the U.S. Merck, the sector's favourite son and its representative in the Dow Jones industrial average, is making a bold play in the hugely attractive Japanese market through its most recent acquisition, Banyin.

Like many of the pharmaceutical stocks, Merck peaked ahead of the stock market last year, chiefly because the continued strength of the dollar had begun to depress earnings prospects.

But Merck's stock price has riseo 6.67 per cent since the beginning of the year, compared with a fall of

Stock	Price $	Change from Jan 1 (%)	p/e
Abbott	40¾	−11	14
Lilly	64¼	+12.2	11
Merck	96	+ 6.7	16
Pfizer	38⅜	+ 8.6	14
Upjohn	57⅞	− 3.4	11

6.92 per cent in the Dow industrials, or of 4.42 per cent in the more broadly based Standard and Poor's 500 stock average on which the Wall Street analysts prefer to base their predictions.

The same trend has been followed by the other pharmaceutical leaders, with Eli Lilly up 12.2 per cent since January 1, Pfizer up 6.6 per cent, and Bristol-Myers, which is almost never out of favour oo Wall Street, some 2.4 per cent ahead.

The companies quoted are among the more prominent in the list of those most closely affected by the outlook for the dollar. Bristol-Myers takes about a third of its sales and about the same proportion of its profits from inside the U.S. Pfizer takes the highest proportion of the sector, with about half its profits and nearly 60 per cent of its sales originating overseas.

Not that the improvement in the prospects for dollar earnings has been sufficient reason to brush aside other considerations. Johnson & Johnson, which soured Wall Street's affections with its widely published problems over Tylenol and then with Zomax, has remained even weaker than the rest of the industrial stock market since Christmas, with the stock down 15 per cent this year.

SmithKline Beckman, which has seen a downgrading of profit forecasts by the Wall Street analysts because of the expectation that sales of its Tagamet anti-ulcer drug will suffer increasingly from the competition from Glaxo's Zantac drug, has lagged behind the rest of the sector – but not the rest of the stock market, it should be said.

The outcome of the strength of the pharmaceutical stocks since the onset of the great shake-out of 1984, is that they are now trading on price/earnings multiples of between 13 and 15.

This appears to compare reasonably with the p/e of 20 on the Dow industrials, itself taking in a number of the old heavyweights which led the market downhill during January and February, and which continue to lie under a cloud as analysts downgrade their profit forecasts on the expectation that the economy may slow down in the second quarter.

But the pharmaceuticals are twice blessed, in that they are also regarded as defensive stocks whose profits from inside the U.S. are likely to be maintained even if belts have to be tightened again in some economic areas.

Moreover, if the dollar does fulfil expectations by falling during 1984, then pharmaceutical stocks still have plenty of scope to respond. In the case of Abbott Laboratories, which has been slow to follow the rest of the sector forward, a weakening in the dollar would be a major benefit to the 25 per cent of sales which come from outside the U.S.

WASHINGTON PRESSED FOR EARLY SOVIET SUMMIT

Kohl urges fresh arms talks

BY STEWART FLEMING IN WASHINGTON

CHANCELLOR Helmut Kohl of West Germany yesterday urged the U.S. to consider entering into new arms control talks with the Soviet Union ahead of the presidential election in November. He also favoured an early summit meeting between President Ronald Reagan and the new Soviet leader Mr Konstantin Chernenko, provided there was confidence it would not be exploited for propaganda purposes.

Interviewed on American television, ahead of his planned meeting with President Reagan today, Mr Kohl made it clear that be is concerned about tensions between the U.S. and the Soviet Union. On the need to resume the superpower dialogue be said that, irrespective of the sharp ideological differences, preservation of peace was such an important goal that every opportunity should be taken to further it.

Mr Kohl made it clear that be intends to press President Reagan on economic issues which are worrying the European governments, in particular signs of mounting protectionist pressures in the Congress and the U.S. failure to tackle the problem of the federal budget deficit.

He said he understood the temptations to introduce protectionist measures in an election year, but added "we will all ha worse off" if they are not resisted. On the budget deficit, he expected little significant change in U.S. fiscal policy ahead of the November election, but added that he hoped for action after the election which would help to bring down U.S. interest rates and have a beneficial effect on the European economy.

Questioned about a recent suggestion by Dr Henry Kissinger, the former Secretary of State, that Western Europe should take on a greater responsibility for its conventional defence, Mr Kohl said that it would be a mistake to reduce U.S. troop levels in Europe, and a mistake to appoint a European to be Supreme Commander of Nato.

But he underlined the importance to the West of the strength of the European as well as the U.S. pillar of the Western alliance, partly in order to resist anti-American and neutralist trends.

In this context, however, he stressed that Western Europe had implemented the twin-track Nato decision and begun to deploy Pershing intermediate range missiles, citing this as evidence of the unity of purpose in the West.

Kissinger's plan for Nato, Page 15

Ustinov and Gandhi to seek better ties

BY JOHN ELLIOTT IN NEW DELHI

THE SOVIET Union will this week attempt to cement its ties with India and to push negotiations forward on important defence orders – at a time when India'e stance as a leading non-aligned nation, plus its wish to buy the most efficient arms, has led it into new links with the West.

Marshal Dimitri Ustinov, the Soviet Defence Minister and one of the most senior figures in the Moscow hierarchy, is visiting India for one week. This visit was postponed just before the death last month of Mr Yuri Andropov.

His visit coincides with a sudden rapprochement during the past few days between India and Pakistan which could have significance ultimately for the Soviet stance on Afghanistan. Concern in Delhi about the activities of Pakistan's troops on the border of India's northern state of Kashmir seems to have abated and on Saturday the foreign secretaries of the two countries agreed to resume talks in May on non-aggression and friendship pacts, after a gap of more than a year.

Marshal Ustinov will be meeting Mrs Indira Gandhi, the Indian Prime Minister, at a time when she is deeply disenchanted with the U.S. over cuts in international aid to developing countries.

In an interview at the weekend with Forbes Magazine, her sympathy for the Soviet Union, which she said was fighting for nationalism not communism, contrasted sharply with criticism of the U.S. which, she said, was "irked when we assert our freedom." There was no place in the U.S. global strategy for India.

While these remarks will be welcomed in Moscow, they are made partly for internal consumption in India, where Mrs Gandhi wants to win the backing in her forthcoming general election of one of the country'e two communist parties which is currently split over her policies.

Moscow's interest in organising the visit so quickly after Mr Andropov's death as the first major overseas trip since the change of leadership, underlines the importance that the Soviet leadership continues to give to maintaining and strengthening its ties with India.

Mrs Gandhi is returning the compliment by putting Marsbal Ustinov up in the Rastrapati Bhavan, the presidential palace in Delhi

Although the Soviet Union was displaced last year by the U.S. as India's major trading partner, its total business with India far exceeds that of the U.S. if its massive defence sales are included.

This week a delegation of senior defence chiefs accompanying Marshal Ustinov will be discussing sales of aircraft, army equipment, and ships.

Observers believe that Moscow is specially concerned that India is turning to British Aerospace, Dassault of France, and MBB and Dornier of West Germany to select a partner to develop indigenous production of a new light Indian combat aircraft.

Progress unlikely in Sino-Soviet split

BY MARK BAKER IN PEKING

THE NEW Soviet leadership has rejected China's plea for significant moves to break the deadlock in their relationship.

Mr Konstantin Chernenko, the recently installed leader, used part of his first important speech to emphasise that the Soviet Union would not make any agreement with China "to the prejudice of the interests of third countries."

His statement indicates the same attitude as that of the previous Soviet leadership: that Moscow will not accept China's demands on Kampuchea, Afghanistan and border troops, including those in Mongolia – the so-called "third countries."

That has confirmed indications that the next round of Sino-Soviet consultations, due to begin in Moscow next Monday, can only make superficial progress in further easing the 20-year rift between the two countries.

China insists that relations can be normalised only when the Soviet Union agrees to end its support for the Vietnamese occupation of Kampuchea, withdraw from Afghanistan and cut the number of troops and missiles deployed along China's northern borders.

Immediately after the death of President Yuri Andropov, a Chinese state councillor, Mr Ji Pengfei, appealed for a new effort towards rapprochement. He said the formal consultations, begun in late 1982, had not solved any of the three obstacles "constituting a threat to China's security."

"We hope that the Soviet side will make common efforts with us in the fourth round of talks to make substantive progress in solving these problems," Mr Ji said.

Mr Chernenko, in a speech delivered on Friday and circulated by the Soviet embassy in Peking, said the Soviet Union was a consistent proponent of normalisation with China and believed that could advance the role of socialism in international affairs.

"Political consultations show, however, that there remain differences on a number of questions of principle. In particular, we cannot make any agreements to the prejudice of the interests of third countries."

He hoped there would be an increase in contacts already being established in economic affairs, culture, science and other fields.

The firm Soviet line in China's demands was emphasised in a statement by Mongolia late last week, publicised by the Soviet news agency Tass, rejecting a reduction in Soviet troop levels in Mongolia.

It said the troops were deployed at Mongolia's request, posed no threat to China and, as the issue was "exclusively an internal matter of our state," could not be an obstacle to normalisation.

Western diplomats have previously regarded the estimated 1m Soviet troops and about 130 SS-20 missiles in the border areas as an issue on which the Soviet Union might have been prepared to make some concessions to China.

THE LEX COLUMN

Wanderlust of the pension dollar

The steady depreciation of the dollar over the past month has given a cutting edge to the presentations of fund managers as they tout their international investment services around the U.S. pension fund industry. Risk diversification models are all very well, but they are no substitute for a currency chart which promises quick and easy capital gains.

To many of London's merchant banks, the pension fund manager in Pittsburgh has become the most glamorous figure in the investment business. As negotiated commissions threaten to squeeze the profit margin on domestic fund management, the ERISA funds of the U.S. pension industry offer a dazzling new area of growth.

Even the more cautious analysts of the industry confidently expect the foreign pool of U.S. pension fund assets to grow at a compound annual rate of 30 per cent or more for the rest of the decade. Last year, on a fairly conservative measure, these international funds under management shot from $7bn to $11bn, with the increase fairly broadly spread between new cash flow and market performance.

Foreign waters

Less than a quarter of U.S. pension funds have so far even dipped their toes into foreign waters. Public-sector bodies and most smaller corporations are still wary of foreign exposure while, even among the bolder funds, no more than 5 per cent of assets is on average invested outside the U.S. The convinced internationalists maintain that an industry average of about 10 per cent should be easily attainable.

In current dollar terms, that would represent foreign investment of $80bn, roughly equivalent to the total capitalisation of West German stock markets. A capital outflow on anything like that scale would clearly have an important effect on the performance, and structure, of non-U.S. securities markets.

The faith of the international evangelists rests heavily on the premise that U.S. pension funds are engaged in a structural redisposition of their portfolios. Yet there must be at least a chance that the widespread diversification of the past two years is largely a bull market phenomenon. The pension funds were after all released from the shackles on foreign investment only as long ago as 1974. Yet the momentum of diversification has gathered strength only recently.

While there is no doubt that the resistance of the pension fund movement to foreign investment on the grounds of balance sheet mismatching has substantially weakened, there is little evidence that the opposite position – diversification reduces risk – has many committed adherents. To most pension fund managers, the theoretical argument is one to be filed away in case trustees cut up rough in a bear market. It is notable that the funds have applied diversification models to the debt markets only to the most limited degree.

Some pension funds have certainly developed overseas portfolios to participate in developing industries which are hardly represented in the U.S. or to gain an exposure to economies with greater long-term growth prospects. Tokyo has been the main beneficiary of this strategic approach. As this investment has frequently driven growth stocks to dizzy multiples, the pension funds have sought out equities which look extremely cheap in relation to their U.S. counterparts or where an industry trend already visible in North America is not yet reflected. Yet this approach also has its limitations: Wall Street buying rapidly brings the relative ratings of Du Pont and ICI closer into line.

For international investment to build at the projected rate, pension fund managers will have to take an increasingly global view of securities trading. In several industries, such as oil or consumer products, foreign companies are already being regarded as substitutes for U.S. equities. Since BAT derives a higher proportion of its earnings from the U.S. than does Coca-Cola, there seems no reason – currency aside – to view the drinks company as the more American investment.

Even if invested funds hold on through a bear market, the enthusiasm of fund managers poised to take the plunge might suddenly wilt. Meanwhile, established investment advisers are already becoming nervous about the growth of shoestring international investment services and the trend towards in-house management by funds with virtually no international track record. A disaster for the more exotic investments could, perhaps affect sentiment throughout the industry.

Bear market

How this attitude will stand up to a bear market is not immediately obvious. In the early 1970s, the pension funds' rapid invasion of the U.S. property market turned to wholesale retreat as values fell. So far, the issue has not been tested in foreign equities. Last year, despite the strong dollar, the Capital International World Index provided a total return of 23.4 per cent, ahead of that from the S & P Composite Index.

In the less liquid markets, such as Sweden, Spain and Italy, a serious turn in sentiment could have a cascading effect as U.S. funds scramble to withdraw. In the late 1950s, heavy U.S. buying pushed the share price of Philips to roughly 35 times earnings as North American ownership of the stock rose to almost a third. When the turn came, the Americans fled and the price collapsed.

The mood is certainly different now and the prospect of a wholesale retreat to Wall Street by the U.S. pension funds is extremely remote. But only a bear market will show whether the international pension fund dollar is as resilient as the investment dollar of the U.S. multinationals.

Protest over Japanese typewriters

Continued from Page 1

comed what it regarded as "fair competition", it would emphatically oppose a "distorted competition" based on dumping.

Olivetti's complaint will prompt an investigation by the European Commission in Brussels. This will involve an examination of the Japanese production costs, domestic selling prices and overseas selling prices.

If there is obvious evidence of dumping, the Commission could impose a provisional anti-dumping duty, pending the completion of a more detailed examination. The final duty would be settled to eliminate the dumping margin.

Alternatively the Commission could reject the complaint altogether as unjustified.

Japanese electronic typewriter manufacturers have made inroads in the European market only in the last four years. They have speedily removed IBM, from its position as market leader with its Golfball typewriters, by providing low-cost automation.

The Japanese producers – Silver Reed, Brother, Sharp, Panasonic, Ricoh, Tokyo Electric and Canon – bave also eaten into the sales of Olivetti and of the two West German manufacturers Olympia and Triumph-Adler.

Hart and Mondale face Maine clash

BY STEWART FLEMING IN WASHINGTON

FORMER Vice-President Walter Mondale and Senator Gary Hart, the challenger who scored an upset victory in the New Hampshire primary last week, were squaring off yesterday for their first bead-to-head confrontation in the race for the Democratic party's nomination to challenge President Ronald Reagan for the White House in November.

The small and hleak New England state of Maine bas become the hattleground for a contest which Mr Mondale himself conceded at the weekend may not finally be decided until tha party convention in San Francisco in July. Before his stunning defeat in New Hampshire, Mr Mondale, to that point the front-runner in the race, had been claiming that he would roll over all the opposition and win the nomination with ease. By last Friday, Mr Mondale had changed his tune. He told a rally in Augusta, Maine: "I'm not the front-runner; this is a very tight race."

Perhaps as few as 20,000 registered Democrats in Maine were expected to attend meetings in 425 towns to publicly declare their allegience for one of the Democratic contenders. But with Senator John Glenn having already disbanded his campaign organisation in Maine to save money, and the Rev Jesse Jackson and Mr George McGovern not seen as active contenders either, only Mr Mondale and Mr Hart are given a chance of victory.

Both candidates changed their campaign intineraries oo Saturday to pay last-minute visits to Maine, which is now being seen as an important test of Mr Mondale's ability to rebound from his defeat in New Hampshire and slow the momentum which Mr Hart picked up with that victory. Although only 27 of the 3,933 delegates to the July convention are at stake, and Maine has not normally been seen as an important test, the New Hampshire primary vote has thrown the Maine caucuses into the spotlight.

In October, Mr Moudale won a straw poll in Maine handsomely, taking 51 per cent of the vote. In theory, be should still be favoured to win since be has spent heavily and campaigned thoroughly in the state and organisational strength is often the key in attracting supporters to spend several bours debating the merits of candidates in a caucus.

Mr Mondale, however, has signalled his concern about Mr Hart's challenge by altering his campaign strategy and directly attacking him over the past few days. A Gallup poll just puhlished by Newsweek magazine underscores the wisdom of the shift.

Gulf Oil and Arco explore terms for bid

Continued from Page 1

around $36 to $69½ last Friday where it capitalises the company at $11.5bn.

The Pickens group, which already holds a 13.2 per cent stake in Gulf, is in the midst of a $65 per share offer for another 6.1 per cent of Gulf, and most observers feel that in the absence of any rival bid, the Pickens group would be able to win control of Gulf.

In what looks like an admission of defeat the Gulf board announced on February 24 that while it thought the Pickens offer was "unfair and inadequate" it had authorised its advisers to "explore all alternatives". Last week Gulf confirmed that it was in talks with several companies regarding a possible merger.

Arco is regarded as the frontrunner for Gulf'e hand. The group has already lined up a $10bn plus credit line which it will use to finance any offer, and Mr Robert Anderson, Arco'e chairman, is known to have had several conversations with Gulf'e senior executives, including discussions of a $70 per share offer, according to Mr Pickens.

The possibility that Gulf will lose its independence bas been heightened by the willingness of the U.S. anti-trust authorities to nod through Texaco'e $10.1bn takeover of Getty Oil earlier this year.

World Weather

		°C	°F			°C	°F			°C	°F			°C	°F
Ajaccio	F	11	52	Dubrovnik	F	7	45	Malaga	S	16	61	Salzburg	Sn	1	34
Akrotiri	S	19	90	Faro	C	15	59	Malta	C	14	57	Seoul	F	3	37
Algiers	S	8	48	Florence	F	9	48	Manila	F	33	91	Singapore	R	29	84
Amsterdam	F	6	43	Frankfurt	S	6	43	Miami	S	16	61	Stockholm	S	1	34
Athens	C	15	59	Funchal	R	17	63	Milan	S	11	52	Strasbourg	F	6	43
Bahrain	F	25	77	Geneva	S	2	37	Moscow	C	-1	30	Sydney	F	24	75
Bangkok	F	34	93	Gibraltar	C	16	61	Munich	C	1	34	Taipei	C	19	66
Barcelona	S	12	54	Guernsey	S	6	43	Nairobi	—	—	—	Tangier	C	18	64
Beirut	—	—	—	Helsinki	C	0	32	Naples	F	10	50	Tehran	—	—	—
Belgrade	C	4	39	H. Kong	C	12	54	New Delhi	F	28	82	Tel Aviv	S	20	68
Berlin	C	2	36	Innsbruck	C	2	36	New York	S	-4	25	Tenerife	F	21	70
Biarritz	F	8	46	Inverness	F	10	50	Nice	S	12	54	Tokyo	F	9	48
Blackpool	C	9	48	Istanbul	F	13	55	Oporto	S	14	57	Toronto	F	1	34
Bordeaux	S	7	45	Jersey	F	7	45	Oslo	F	-2	28	Tunis	F	13	55
Brussels	S	3	37	Jo'burg	F	32	90	Paris	S	7	45	Valencia	S	13	55
Budapest	F	10	50	Las Palmas	F	23	73	Prague	C	1	34	Venice	F	6	43
B. Aires	F	28	82	Lima	—	—	—	Reykjavik	F	1	34	Vienna	C	2	36
Cairo	F	22	72	Lisbon	S	13	55	Rio de J'o	C	38	100	Warsaw	C	2	36
Cape Town	—	—	—	Locarno	C	12	54	Rome	F	13	55	Zurich	S	4	39
Caracas	C	29	84	London	R	7	45								
Casablanca	F	17	63	Los Angeles	C	14	57								
Copenhagen	S	2	37	Luxembourg	S	2	36								
Corfu	F	11	52	Madrid	S	9	48								
Dublin	C	10	50	Majorca	D	9	48								

Readings at mid-day yesterday:

C-Cloudy D-Drizzle F-Fair Fg-Fog H-Hail R-Rain S-Sun Sl-Sleet Sn-Snow T-Thunder

Syria in troops pact

Continued from Page 1

ment would be made today signalling the end of Lebanon's woes.

President Gemayel met Mr Franjieh and Mr Rashid Karami, a former prime minister, in north Lebanon over the weekend.

The agreement reached between the Syrian President and the Lebenese opposition leaders yesterday would mean that the Lebanese Cabinet, which resigned last month, would bave to be re-constituted temporarily to legalise the cancellation of the troop withdrawal pact with Israel.

Our Tel Aviv Correspondent reports: There was no immediate reaction from Israel last night to the Damascus announcement.

Previously, however, Mr Yitzhak Shamir, the Israeli Prime Minister, had made clear that in the event of an abrogation of the withdrawal pact, Israel would feel free to take whatever military measures it might feel necessary in south Lebanon to safeguard the security of its northern border.

Mr Shamir said last week that Israel would not feel itself bound by any of the limitations it agreed in the May 17 agreement, reached after months of tortuous negotiations between Lebanese and U.S. delegates.

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SECTION II – COMPANIES AND MARKETS
FINANCIAL TIMES
Monday March 5 1984

Cash-rich banks offer good terms to corporations

BY PETER MONTAGNON, EUROMARKETS CORRESPONDENT, IN LONDON

THERE could scarcely be a more telling indication of liquidity in the international banking system than the $12bn surprise credit sprung on the Eurocredit market by Atlantic Richfield (Arco) last week.

Not only is this the largest bank loan ever, it is also being put together in the space of little more than a week, as Arco expects to be able to sign the credit this week. It needs the funds to buy Gulf Oil, with which it is now in discussion. Like many other jumbo credits for oil industry majors, this deal could always unravel if the takeover talks fail.

Yet last week there was no escaping the conclusion that banks have plenty of money at their disposal for clients they like. Increasingly nowadays, those clients are corporations rather than sovereign states.

Arco's credit is to be for eight years, revolving for the first two. It will pay a margin of ⅜ per cent over Eurodollars for the first four years, rising to ½ per cent for the next four with a commitment fee of ⅛ point. Alternatively, banks may subscribe a mixture to be determined by the borrower of Eurodollars at the same margins and U.S. domestic dollars priced at a ⅛ percentage point higher margin over Certificate of Deposit rates.

These terms are comparable with those a top-rated European government could command in the market today, but they are more generous to lenders than those on another corporate deal – the $650m credit being assembled for Shell Petroleum by Algemene Bank Nederland.

Neither Shell nor the bank will confirm the terms of this credit, but bankers report that it carries a margin of only ¼ per cent over Eurodollars for four years. Shell wants the money to buy the shares in Shell Oil Co. that it does not already own.

Two factors seem to have dictated the more generous approach of Arco, whose credit is led by Chase Manhattan. First is the need for speed, and second the sheer size of the deal. Only about 100 banks have been approached which means that the average participation will be $120m.

All participants will thus have to be very large institutions with established relations to the borrower. These are precisely the sort of banks which are most liquid; there is still much less certainty how far this liquidity permeates through to smaller banks which might come into syndicated loans at a junior participant level.

Elsewhere, banks in Ireland's $500m credit signed last year have not yet decided on their reply to its request for a renegotiation on more favourable terms, although some bankers believe that a compromise solution could begin to emerge towards the end of the week.

Banks are also still awaiting a decision from the Soviet Union's Foreign Trade Bank on whether it wants an increase in its $150m credit. The same borrower is meanwhile in discussions with FRAB Bank about another $100m credit, probably syndicated exclusively among Arab institutions, although no mandate has been awarded.

This week should see some fresh movement on the rescheduling front. Meetings with key creditors are scheduled for a number of countries including the Philippines, Yugoslavia and Argentina.

Yugoslavia's agreement in principle with the International Monetary Fund on terms of a new credit, should pave the way for progress in talks with international banks in Belgrade today and tomorrow. The banks have already proposed terms for a rescheduling of between $1.35bn and $1.6bn in debt falling due this year, but Yugoslavia delayed replying till its talks with the IMF were complete.

INTERNATIONAL BONDS

Saturation worries prompt frills on FRN deals

BY MARY ANN SIEGHART IN LONDON

IT IS usually a sign of near-saturation in the Eurobond market when the plain "vanilla" bond disappears, to be replaced by one with bells and whistles attached. It means that investors at the margin have to be lured back by the prospect of something new and attractive.

But the deal as a package has still to be good value for the gimmick to do its stuff, as two deals launched last week amply illustrated.

Danske Olie & Naturgas (DON), the Danish state oil company, offered $100m of floating-rate notes paying ⅛ per cent over the three-month London interbank offered rate (Libor) through Goldman Sachs and Morgan Stanley. Although the interest is paid quarterly, it is recalculated every month.

So, if rates rise, the coupon will adjust much more quickly than is the case on normal FRNs where coupons are set only as often as they are paid.

In a bearish market like this one, more frequent setting seems attractive. But it also has an advantage for people who are borrowing money in order to buy FRNs.

If interest is set and paid only twice a year, as on most FRNs, many institutions feel that mismatching their funding – that is, borrowing more cheaply for a shorter length of time – can be dangerous if rates move against them. But if the interest is also set on a monthly basis, investors can feel pretty safe borrowing monthly, and can usually pick up the healthy margin between the one-month Libor at which they borrow and the three-month rate they are paid.

The only danger arises if three-month Libor falls below the one-month rate. At the moment there is a ¼ point differential, which has also been the average difference over the last two years.

BHF Bank bond average		
March 2		Previous
99.670		99.683
High	1983-84	Low
102.017		97.699

This twist to the DON deal allowed the borrower to raise money on cheaper terms than Denmark itself did in January. But it was also popular with investors and traded at a discount well within its 0.20 per cent selling concession.

Thailand, by contrast, used roughly the same formula on its $85m FRN led by Manufacturers Hanover. Its bond paid ⅛ per cent over six-month Libor, with the coupon reset every three months. Although it had the same funding advantages, investors considered the terms to be too aggressive and the issue traded at a discount greater than its 0.75 per cent total commissions.

Another sign of investment bankers' worry about the FRN market's capacity to absorb much more paper is that many are trying to concoct a hybrid instrument which combines the marketability of a floater with the spreads available in the Eurocredit market.

Some bankers perceive that the move from syndicated loans to FRNs has gone too far and is likely to rebound. But the banks as investors are loath to relinquish the ability to buy and sell their assets.

One answer might be to increase the use of Euronote issues, in which paper is placed with investors who can either bid at a tender panel monthly or quarterly for the paper at a price they choose or can resell it back to the lead manager.

NEW INTERNATIONAL BOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead Manager	Offer yield %
U.S. DOLLARS							
Societe Generale †‡ⴔ	250	1994	10	⅛	100	Soc. Generale, Bk. of America, Merrill Lynch	–
Casio Computer Co. ¶‡	60	1989	5	5⅞	100	Daiwa Europe	5.875
Tokyo Electric ¶‡	70	1989	5	5½	100	Daiwa Europe	5.500
Fujitsu §	180	1999	15	3	100	Nikko Secs., Kleinwort Benson	•
Japan Devt. Bank ††‡	100	1991	7	11⅞	99.424	First Boston	12.001
Digital Equipment ‡	150	1989	5	11¾	100	Lehman Bros.	11.750
Texas Instruments ‡	150	1991	7	11⅞	99¾	Morgan Stanley	11.930
City of Montreal ‡	70	1991	7	12½	100	Citicorp	12.500
Intl. Paper ‡	75	1991	7	12	99½	Salomon Bros., Goldman Sachs	12.110
Illinois Power ‡	100	1992	8	12½	100	CSFB	12.500
Soc. Gen. de Surveillance §‡	58.7	1994	10	4½	100	UBS Secs.	4.500
Arbuthnot Latham †‡	30	1992	6	3/16	100	Bk. of America Intl.	–
Equitable Bk. Corpn. †(b)‡	50	1994	10	¼	100	Quadrex Secs.	–
Ind. Bk. of Finland †(a)‡	40	1994	10	⅛	100	Merrill Lynch	–
Gt. Western Fn. †‡	100	1994	10	½	100	CSFB	–
Thailand †‡	85	2000	16	⅛	100	Man. Hanover, Dresdner SE Asia, LTCB Intl., Mitsubishi Fin.	–
Danske Olie & Naturgas †(b)‡	100	1999	15	⅛	100	Goldman Sachs, Mgn. Stanley	–
Bque. Indosuez †(a)‡	150	1999	15	¼	100	CSFB, Bque. Indosuez, Deutsche	–
D-MARKS							
Nippon Flour Mills ¶‡	30	1989	5	3½	100	Bay. Vereinsbank	3.500
Ferrovie dello Stato ‡	100	1991	7	8	99½	Commerzbank	8.096
Austria ‡	200	1994	10	7⅝	100¼	Dresdner Bank	7.588
Finanzierungsinstituett **‡	30	1989	5	7⅞	100	Commerzbank	7.875
SWISS FRANCS							
Tokuyama Soda **§‡	50	1989	–	2	100	UBS	2.000
Japan Aviation Elec. **§‡	40	1989	–	2	100	SBC	2.000
OKB ‡	100	1992	–	5¾	100	SBC	5.750
GMAC ‖‡	100	1996	–	5¼	–	Soditic, Mgn. Stanley	5.250
Nat. Provident Fund, N.Z. **‡	100	1989	–	5⅜	100	SBC, CS, UBS	5.375
Mitsui OSK Lines **‡	100	1989	–	5¾	100	SBC	5.750
SWISS FRANCS							
ENHER **‡	50	1989	–	6¾	100	SBC	6.750
ESCOM **‡	100	1989	–	6¼	100¼	Bank Leu	6.190
Marusan Co. **¶	30	1989	–	3½	100	Swiss Volksbank	3.500
Fujitsu **§	150	1989	–	1⅞	100	CS	•
Showa Elec. Wire **§	50	1989	–	2	100	SBC	•
Jap. Fin. Corp. for Munic., Entps.	100	1994	–	•	•	CS	5.625
Nichias Corp. **§	50	1989	–	2⅛	100	CS	•
Nisshin Steel †‡	100	1991	–	¼	100	Citicorp Switz.	–
STERLING							
IADB ‡	60	1991	7	11⅜	99¾	Baring Bros., SG Warburg	11.429
SNCF ‡	60	1994	10	11¼	100	Mgn. Grenfell	11.250
ECUs							
Royal Bk. of Canada ‡ⴔ	85	1989	5	10½	100¼	Orion Royal, BBL, Kredietbank Intl., Soc. Gen. de Bque.	16.433
South Africa Q‡	40	1999	15	11¼	100	CCF, Kredietbank Lux., BIL	11.250
ANZ Bking Grp.‡	50	1991	7	10¾	100¼	BBL, Sal. Bros., ANZ, BNP, Enskilda Secs., Kredietbank Intl., Soc. Gen. de Bque.	10.697
RATP	40	1992	7.025	10⅞	•	Credit Lyonnais, CCF, BBL	•
RATP	20	1994	9.5	11	•	As above	•
EEC	60	1991	7	10½	•	Caisse Gen. d'Epargne de Retraite	•
GUILDERS							
Bk. Mees & Hope ‡	100	1994	10	8½	101	Bk. Mees & Hope	8.260
YEN							
AVASA **‡	5bn	1994	9	8.4	100	Nippon Credit Bank	8.576
Ireland ‡	15bn	1994	9	7.6	99.7	Daiwa Secs.	7.790
Eurofima ‡	10bn	1994	10	7⅜	100	Nomura Secs.	7.375

* Not yet priced. ‡ Final terms. ** Placement. § Convertible. † Floating rate note: coupon is spread over 6-month Libor. (a) Spread over mean of 6-month bid and offered rate. (b) Spead over 3-month Libor. ¶ With warrants.
‖ Dual currency issue repayable in dollars. ⴔ Increased. Q Coupon rest every 5 years. †† Registered with U.S. S.E.C.
Note: Yields are calculated on AIBD basis.

INTERNATIONAL CAPITAL MARKETS AND COMPANIES

U.S. BONDS

Underlying mood still grim despite late rally

LONG-TERM U.S. bond prices slumped to their lowest levels for almost six months last week before bouncing back in a thin-based rally spurred by a smaller-than-expected increase in M1 and a perception by Wall Street dealers that the market may have been oversold.

But the late rally disguises the real malaise of the market. Retail investors are steering clear of the long issues—preferring to stay short or to avoid the market altogether fearing the potential for further price declines.

While the markets' immediate prospects remain uncertain its underlying mood — reinforced once again last week by warnings from Mr Paul Volcker, the Fed chairman, about the implications of the twin budget and trade deficits—remains grim.

U.S. INTEREST RATES (%)

	Week to Mar 2	Week to Feb 24
Fed funds weekly average	9.62	9.00
3-month CDs	9.78	9.75
3-month T-bills	9.14	9.18
30-year Treasury bond	12.09	12.12
AAA Utility	13.00	13.00
AA Industrial	12.88	12.88

Source: Salomon Bros. (estimates).
In this week ended February 20 M1 rose by $1.7bn to $534.7bn.

Concerns about the pace of the economic recovery and the first real indications of a broad-based upswing in private credit demands are heightening inflationary concerns at a time when the Federal Reserve Board's already slim room for manoeuvre is seen as disappearing altogether.

The credit markets remain deeply cynical about presidential and congressional attempts to cut the budget deficit in an election year despite the three-year $50bn deficit cutting proposals which emerged from the tax-writing house ways and means committee late on Friday.

While uncertainties remain and no firm consensus has emerged, many economists now believe that the Fed may soon have little choice but to firm in order to maintain its anti-inflation credibility — particularly if the economic statistics continue to show the economy bounding ahead. For this reason the markets' attention is now beginning to focus on the next Federal Open Market Committee (FOMC) policy making meeting on March 26 and 27. These concerns are clearly apparent in the current interest rate structure and the yield curve.

The Treasury auction of $6bn of five year notes on Tuesday produced an average yield of 11.84 per cent—the highest yield at a five-year auction since the beginning of the rally in August 1982.

At the long end the Treasury long bond has fallen almost five full points since mid-January when it was selling for 103½ and yielding 11.60 per cent.

It fell to a low of 98 1/16 at one point on Tuesday to yield 12.21 per cent—the highest yield since August last year. Even at those levels retail interest was virtually non-existent. By the end of the week the late rally had lifted the price to 99¼ —a 10 basis points gain over the previous Friday's close—demonstrating the market's high volatility.

In contrast, although short-term rates have moved sharply higher since January, they remained virtually unchanged last week with the three month T-bill rate trading within a 3 basis point range and closing at 9.15 per cent.

The pressure to stay short is also apparent in the corporate market. Until last week the cumulative total of corporate new issue volume had managed to outpace the comparative 1983 figure. But last week, with just $625m of new corporate debt issued, the total so far this year grew to $9.9bn.

Meanwhile short-term borrowing has picked up smartly. Business borrowing at U.S. banks and non-financial commercial paper grew at a 19 per cent annual rate between the start of the year and mid-February.

Intermediate prices in the corporate bond market rose by a moderate ⅜ points last week while long-term prices declined by about ½ point. Among the new issues launched, United Brands sold $100m of 14¼ per cent 25-year debentures at par and Beneficial Corporation sold $75m of 5-year notes with a 12.6 per cent coupon at par.

Paul Taylor

HK returns to domestic borrowing

BY ROBERT COTTRELL IN HONG KONG

THE HONG KONG Government is expected to announce shortly the terms on which it will seek to raise HK$1bn ($128.5m) through a Hong Kong dollar-denominated bond. The coupon has yet to be decided, but it seems certain that maturity will be five years.

The issue will mark the Hong Kong Government's first issue of domestic debt for nine years. In 1975 it raised HK$250m in a five-year bond issue.

Helped by a succession of budget surpluses, Hong Kong had not needed to borrow further, having built up reserves which are likely to stand at HK$15.8bn at the end of March, 1984.

However, last year the Government incurred a budget deficit of HK$3.5bn and for 1983-84 the deficit is likely to be HK$3.3bn.

The cause of this lurch into the red is a slump in the land-sales revenue with which the Government used to fund up to one-third of its expenditure. The collapse of Hong Kong's property market means that land is being sold cheaply if at all.

Much of the Government's fiscal reserves, meanwhile, are pledged to guarantee "off-balance-sheet" debts such as those of the Mass Transit Railway Corporation, which is Government-owned but which enjoys commercial independence. The Government forecasts that its contingent laibilities on March 31 1988 will be HK$22.7bn.

The Government maintains a forward cover of one-third of future contingent liabilities against current fiscal reserves. Thus out of the HK$15.8bn reserves which will be available to the Government at the end of the current financial year, HK$7.6bn is regarded as cover for contingencies, and HK$8.2bn as "free" reserves.

Rather than see the coming year's deficit eat fully into free reserves, the government is covering half the shortfall with a bond issue. The offer will be made by open tender, and local analysts believe the government may end up paying around nine per cent for its money—roughly the expected level of inflation this year in Hong Kong.

The issue is small but will throw up a benchmark pricing for fixed-interest Hong Kong dollar debt which will be useful to potential private-sector issuers.

A local bond issue from the private sector is more of a pious hope than a probability at present, with Hong Kong's financial markets only now settling down from their politically-induced volatility of 1983. A fledgling market in short-term commercial paper is, however, gaining a little depth.

The pioneering of the Hong Kong dollar commercial paper market is the work of the Mass Transit Railway Corporation, which has some HK$700m of paper outstanding in the market, and a further HK$200m of undrawn underwritten facilities available.

The Hongkong Land Company has issued two tranches of about HK$50m each. Jardine, Matheson, the sister-company of Hongkong Land, is expected soon to issue up to HK$300m, and an associate of China, Light, and Power, one of Hong Kong's two local utilities, up to HK$250m.

A secondary market has yet to develop, but local banks working to nurture it include Jardine Fleming, Wardley, Barclays, and Citibank. The pricing of Hong Kong commercial paper is usually over Hong Kong interbank Rate, though the Mass Transit Railway has part of its facility priced over local prime.

The MTRC is also thought to be considering a further innovation, an issue of U.S.$ denominated commercial paper.

Occidental to buy back preferred stock

BY WILLIAM HALL IN NEW YORK

OCCIDENTAL PETROLEUM is paying $333m to buy back some of its Preferred stock. The move is part of Occidental's efforts to strengthen its balance sheet following the 1982 acquisition of Cities Service.

As part of the deal the group issued $1.6bn of Preferred stock. The stock is a relatively expensive form of financing and the dividends cost Occidental $368m in 1982. Last year the group purchased 1.4m shares of its Cumulative Preferred stock.

Dr Armand Hammer, the 85-year-old chairman and chief executive of the Los Angeles based energy conglomerate, announced last Friday that Occidental had agreed to purchase from Drexel Burnham Lambert 3m shares of Occidental's $15.50 cumulative preferred stock at $111¼ per share. It is expected that the purchase will be financed by bank borrowings.

Since it acquired Cities Service, Occidental has moved surprisingly quickly in reducing the heavy financial burden it was forced to take on. Last year it cut its debt from a peak of $6.3bn to under $5bn.

● Deere, the U.S. farm equipment producer, said its Mexican affiliate John Deere has acquired the farm equipment manufacturing facilities of International Harvester in Saltillo, Mexico. Terms were not disclosed, reports AP-DJ.

The company said there had not been any production at the facility "for some time." Deere said production at the Saltillo factory will be phased in as Mexican economic activity increases. Production will be mainly tractors.

Brown Boveri Group makes senior changes

● Dr Werner Thommen is to become a general manager of of Baden, and a Member of the Brown Boveri Group's managing committee on April 1. He is foreseen as successor of Mr Erwin Bielinski as head of Brown Boveri International. Mr Bielinski will himself take over the Swiss division from Mr Heiner P. Schulthess, who will take over responsibility for corporate planning and assume management of the group's medium manufacturing companies' division. This is currently headed by managing director and managing committee chairman Mr Piero Hummel. At the same time, Dr Thomas P. Gasser, head of group finances, will additionally take over responsibility for corporate marketing.

● Mr John B. Hyde has been elected to the governing board of the U.S. investment bank, L. F. ROTHSCHILD UNTERBERG TOWBIN, of New York. He is chief executive of Charterhouse J. Rothschild, which has a 50 per cent interest in L. F. Rothschild Unterberg Towbin.

● Mr Helmut Maucher, managing director of Nestle SA, is at the shareholders' meeting of CREDIT SUISSE on March 23 to be nominated to the board. He will succeed Dr Arthur Fürer, currently chairman of Nestle, who is to become chairman of Bank Leu, another of Switzerland's "Big Banks."

INTERNATIONAL APPOINTMENTS

● SEARLE LABORATORIES has appointed Mr Walter Spath vice-president of communications, succeeding Mr Donald E. Burggrabe, who has elected to join Searle's department of industry affairs as executive director of professional relations for the western region.

● Mr Pierre-Alexandre Mamin has been appointed manager of CHARMILLES TECHNOLOGIES, of Geneva. He succeeds Mr Juerg Anderegg, who remains managing director.

● Mr Harry J. Gray has agreed to continue for a further year as chairman and chief executive officer of UNITED TECHNOLOGIES CORPORATION until December 31 1985. He will reach normal retirement date on December 1 1984. Mr Gray is a director of Citicorp and Citibank, New York City. Mr John S. Reed, vice-chairman of Citicorp and Citibank, has been elected a director of United Technologies.

● Dr Alan R. Timms has been appointed director, research and development, for MONSANTO'S health care division in St Louis, Missouri. Dr Timms joins Monsanto from Sandoz Inc, where he was most recently director, group pharmaceutical development and as a member of the Sandoz board of management in Basle, Switzerland.

● Mr Alex S. C. Wu has been appointed a non-executive director of the now Hong Kong-based BSR INTERNATIONAL. His appointment represents a further step in the policy of increasing the non-executive representation by outside directors on BSR's main board. Mr Wu is a director of several Hong Kong public companies including Green Island Cement Company, Hong Kong Aircraft Engineering Company, Longman Group (Far East), Asia Dairy Industries (HK), and Dai Nippon Printing (HK).

Mr Alex Wu, non-executive director of BSR International

● Mr Roy T. McLamore has joined LONDON MERCHANT SECURITIES as president, chief executive officer and a member of the board of its wholly-owned subsidiary LMS American Holdings Corpn (LMSA), New York. Prior to joining LMSA, he was with the MASCO Corpn and served as chief executive officer of Zenith Exploration Co, where LMSA and MASCO are majority shareholders. Mr McLamore will remain chairman of Zenith.

● The SOUTHEAST BANKING CORPN board of directors has elected Mr Joseph E. Thompson senior vice-president, administration, and corporate secretary. He will be responsible for the legal, regulatory and corporate affairs functions of Southeast Banking Corpn and Southeast Bank. His responsibilities also include the public relations department, Southeast Banking Corpn Foundation and Southeast's fine arts department.

● Mr John J. Ford, former staff director of the House Armed Services Committee, has been elected vice-president, government affairs of AVCO CORP. He replaces Mr John R. Kelley who has retired after 20 years with the company. Mr Kelley will remain a consultant.

● Mr Fred M. Wells, vice-president, industrial chemicals division, of THE PROCTER AND GAMBLE CO, will retire on February 29. In anticipation of his retirement, Mr Frank F. Smith currently associate manager, industrial chemicals division, is appointed manager, industrial chemicals division, succeeding Mr Wells in this responsibility immediately.

● CHRYSLER CORP has made four executive appointments in the corporate procurement and supply office. Mr Thomas T. Stallkamp is appointed director of production purchasing. Mr James T. Watson, has been appointed director of body and trim purchasing; and Mr Ronald A. Majeske, director of power train and chassis purchasing. Mr Barry D. Price is named director of facilities purchasing. Mr Stallkamp succeeds Mr Conrad T. Coen, who was recently named to the newly-created position of director, purchasing quality and supplier relations.

● Mr Eugene C. Smith has been named senior vice president, operations of CNG PRODUCING COMPANY, New Orleans, an exploration and production subsidiary of the Consolidated Natural Gas Company. He was the subsidiary's vice president, operations.

● Mr Herbert R. Hirsch, Mr James T. Verfurth and Mr John D. Wadhams have been named senior vice presidents of BARCLAYS AMERICAN CORP. Mr Hirsch joined Barclays American/Business Credit, a wholly-owned subsidiary of Barclays American Corp., in 1973 and was promoted to senior vice president in 1975. Mr Verfurth joined the same company in 1956. Mr Wadhams joined Barclays American/Business Credit in 1973 as senior vice president, responsible for launching the company's real estate lending operations. Finally, Mr Patrick F. Flanagan, Mr Ray Sprott, Mr Michael H. Walters and Mr Gary L. Williams have been named assistant vice presidents and Mr John H. Popleniek has been named financial sales officer.

● Mr Rudolf Stamp has been appointed group management chairman of HERO CONSERVEN, the Swiss-owned food processing concern, following the upgrading of the Swiss national management to a group leadership function. Mr Fredy F. Kreis, head of the former subsidiaries management unit, has been given special duties abroad.

● Dr Hermann Oetmatt has joined the board of EUROPEAN GENERAL REINSURANCE COMPANY of Zurich. Mr Arne Schmetz and Mr Willy Ampacher have left the board.

● Mr Douglas A. Henderson has succeeded Mr Firman G. Bentley as managing director of POLYSAR INTERNATIONAL, Fribourg. Mr Bentley remains company chairman. At the same time, Mr William Evens, Mr Jonathan C. Feldman and Mr Neil E. Roberts have been appointed managers.

● OWENS-ILLINOIS INC'S president and chief operating officer Mr Robert Lanigan will also become chief executive officer on January 1. He succeeds Mr Edwin Dodd, chairman of the board and chief executive officer, who will reach retirement age. Mr Dodd will continue as chairman.

FT INTERNATIONAL BOND SERVICE

U.S. DOLLAR STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

Average price changes... On day +0⅛ on week −0⅛

DEUTSCHE MARK STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

SWISS FRANC STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

YEN STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

OTHER STRAIGHTS

	Issued	Bid	Offer	Change on day	Change on week	Yield
[illegible]						

FLOATING RATE NOTES

	Spread	Bid	Offer	C.dte	C.cpn	C.yld
[illegible]						

CONVERTIBLE BONDS

	Cnv. date	Cnv. price	Bid	Offer	Chg. day	Prem
[illegible]						

EUROBOND TURNOVER (nominal value in $m)

	Cedel	Euro-clear
U.S. $ bonds		
Last week	7,415.7	19,339.1
Previous week	8,359.1	16,496.1
Other bonds		
Last week	2,172.4	1,439.9
Previous week	2,112.8	1,513.5

* No information available—previous day's price.

† Only one market maker supplied a price.

STRAIGHT BONDS: The yield is the yield to redemption of the mid-price; the amount issued is in millions of currency units except for Yen bonds where it is in billions. Change on week=Change over price a week earlier.

FLOATING RATE NOTES: Denominated in dollars unless otherwise indicated. Coupon shown is minimum. C.dte=Date next coupon becomes effective. Spread=Margin above six-month offered rate (‡ three-month; § above mean rate) for U.S. dollars. C.cpn=The current coupon. C.yld=The current yield.

CONVERTIBLE BONDS: Denominated in dollars unless otherwise indicated. Chg. day=Change on day. Cnv. date=First date for conversion into shares. Cnv. price=Nominal amount of bond per share expressed in currency of share at conversion rate fixed at issue. Prem=Percentage premium of the current effective price of acquiring shares via the bond over the most recent price of the shares.

The list shows the 200 latest international bonds for which an adequate secondary market exists. The prices over the past week were supplied by: Kredietbank NV; Credit Commercial de France; Credit Lyonnais; Commerzbank AG; Deutsche Bank AG; Westdeutsche Landesbank Girozentrale; Banque Generale du Luxembourg SA; Banque Internationale Luxembourg; Kredietbank Luxembourg; Algemene Bank Nederland NV; Pierson, Heldring and Pierson; Credit Suisse/Swiss Credit Bank; Union Bank of Switzerland; Akroyd and Smithers; Bank of Tokyo International; Blyth Eastman, Paine Webber International; Chase Manhattan; Citicorp International Bank; Credit Commercial de France (Securities) London; Daiwa Europe NV; EBC; First Chicago; Goldman Sachs International Corporation; Hambros Bank; IBJ International; Kidder Peabody International; Merrill Lynch; Morgan Stanley International; Nomura International; Orion Royal Bank; Robert Fleming and Co; Samuel Montagu and Co; Societe Generale Strauss Turnbull; Sumitomo Finance International; S. G. Warburg and Co; Swiss Bank Corporation International; Wood Gundy.

Closing prices on March 2

UK COMPANY NEWS

Ice cool and well-conditioned

Ray Maughan traces the ever-active career of Suter's David Abell

EVEN BY comparison with his ever-active working life, these are busy times for Mr David Abell. On Friday last week he issued the Class 1 document to shareholders in Suter Electrical, the hairdressing equipment, refrigeration and air conditioning group, detailing the sale of a major compressor and air-conditioning unit and watched with amusement the speculation which brewed up as Mr Christopher Moran, the Lloyd's broker, was rumoured to have increased a stake in Suter.

On the following day, Mr Abell was due to watch his new steeplechaser, Mick's Ritual, run at Market Rasen and today he expects to receive planning permission for the sale of surplus land at Theale in Berkshire.

Mick's Ritual's form under the handling of Mr Paul Felgate, the newly-appointed trainer may be a matter for the bookmakers but Mr Abell is convinced that Suter is now on course for thoroughbred earnings growth.

He has been involved with Suter since February 1978 when, with Mr Jeffrey Pike, the former head of Tremletts, he took a commanding 30 per cent stake.

When Mr Abell left British Leyland in January 1981 after spells as corporate treasurer, and chairman and chief executive of BL Special Products and Commercial Vehicles divisions, it seemed natural that his first acquisition target should be Prestcold, the refrigeration group.

Prestcold was one of the major elements at Leyland Special Products, but never seemed to find a place in BL's overall structure in the reorganisation which followed the integration of other special products activities into Leyland Vehicles.

Suter paid BL £9m for Prestcold in March 1981, and financed the bulk of the acquisition through a £7.7m rights issue. Its net worth, including £4.05m of property, was £15.37m. Suter acquired the refrigeration group, Mr Abell explained at the time, at a discount because it was losing money—but the losses continued despite stringent cost reduction and reorganisation.

Its contracting division went for £1m, about asset value, to Riordan International after absorbing trading losses in excess of £1m in 1982. In the same year, Prestcold's semi-hermetic unit division (SHUD), which makes compressors for commercial refrigerators, coupled with the results of its German and North American distributorships, showed a loss of £1.26m before nominal tax.

Copeland Corporation of America is now buying SHUD, with its distributorships, for £9m. With the disposal of adjoining land, a leading broker has recently calculated that Suter's net indebtedness of £10m will be eliminated and, after early conversion of Suter's loan stock, will produce positive cash of some £9m.

But this had been Suter's core business which, as Mr Abell says, "gave me a sizeable chance" when Suter first started its expansion. He admits now that "we got off to a poorish start and I take the blame for it." After his responsibilities at BL, Mr Abell, more than anyone else, should have understood the potential — and problems — at Prestcold—but he defends the disposal by pointing to the increase in performance of hermetic refrigerators which go outside Prestcold's range up to 5hp, and the entry of Japanese competition into the rotary compressor market. "It is logical it should go to Copeland," he adds.

Anyway, as he is first to admit, "I'm impatient." He makes no secret of his ambition to build an industrial holding group based on low technology industries on the lines of Hanson Trust or BTR. "Already," he claims, "we are miles ahead of where they had got to after the same time."

The air-conditioning business of Searle and the RA air-conditioning business acquired from Delat Group, are working flat out, he says. The original Suter hair-dressing equipment operation is said to be progressing smoothly and, above all, Suter's National Refrigeration Supplies wholesaling business, retains the UK and Eire rights to Prestcold's products. NRS is expected to push turnover up by £5m to £22m annually which, with the benefits of the balance sheet transformation, may lift profits quite substantially this year.

After losses of £1.26m in 1982, Mr Abell claims that Suter has beaten outside stockbroking estimates of a £1.8m profit for 1983, nor does he quibble too much with bullish market estimates of £3.6m for the current year.

Quite apart from the nuts and bolts activity of making and selling air-conditioning units and hair-dressing equipment, Mr Abell's long-standing obsession with the stock market means that Suter will always be in the forefront of takeover speculation.

Tilbury Contracting and Appleyard, the vehicle distribution group, have both seen Suter and Mr Abell come and go in recent years, and latterly Mr Abell has turned up on the board and the register of Downs Surgical, now subject to a bid from Smiths Industries and Lake and Elliott, the steel foundry group, which has recently undergone a management shake-up co-ordinated Hambros Bank.

Suter has paid particular attention to Francis Industries, the packaging and industrial products group, and its 25 per cent-plus shareholding was enough recently to block Francis' plans to cut debt by buying-in early its outstanding loan stock.

Mr Abell's presence has, he says, taken Francis' shares outside his buying range and much the same rise has taken place at RHP Group, the ball-bearings manufacturer which, like BL, was put together in the 1960s by the Industrial Reorganisation Corporation.

Suter has 2 per cent of RHP, acquired at about 35p per share, but the subsequent 20p share price increase may have deflected Suter's ambitions for RHP's electrical products interests...

Wherever his share dealings take Suter, Mr Abell remains highly confident about the group's future. "We're going to shatter people," he declares.

SHARE STAKES

Standard Life Assurance Company has acquired a 10.73 per cent shareholding in Alexanders Discount, the discount house, which is the subject of a takeover bid from Mercantile House.

Glaxo Holdings — Morgan Guaranty Trust Co through its nominee company, Guaranty Nominees, holds 56,762,388 ordinary.

Hewit Group — EKS Inv AB (Sweden) has increased its holding by 90,000 ordinary and now holds 3,742,500 (8.82 per cent).

Aldous International — Prudential Corporation on behalf of Prudential Assurance and Prudential Nominees now holds 694,000 ordinary (6.2 per cent).

Staveley Industries — Prudential Corporation has reduced its shareholding to 966,971 ordinary (5.97 per cent).

Unigroup — Mr S. J. Wootliff has disposed of 30,000 ordinary. He remains beneficially interested in 835,000 ordinary (14.39 per cent).

Marston Thompson and Evershed — Robt. Fleming and Co has bought for an associate 150,000 ordinary.

Charles Baynes — Mr William Clegg, director, has disposed of 35,194 ordinary and Mrs J. A. Clegg has disposed of 6,615 ordinary.

Martin Ford — The Martin Ford Trust of which Mr M. Ford, managing director, is a beneficiary, has sold 50,000 ordinary.

The Lincroft Kilgour Group — Drayton Consolidated Trust has acquired a further 45,000 ordinary and now holds 922,000 (20.17 per cent).

Hambros Investment Trust — Hellenic and General Trust, a wholly-owned subsidiary, has disposed of 750,000 ordinary and now holds 4,500,000 (8.43 per cent).

Sumrie Clothes — Le Chevalerique has purchased 25,000 shares and now holds 515,000 (20.60 per cent).

Harvey and Thompson — Matherwood has acquired a further 15,000 shares bringing its holding to 195,000 (6.21 per cent).

Elswick-Hopper — Mr A. F. Blacker, director, has disposed of 400,000 ordinary and now holds 193,934. Mr J. L. Turner, director, has for himself and his wife disposed of 11,500 ordinary and now holds 436,895.

G. R. Dawes — H. A. L. Dawes has sold a total of 150,000 shares; H. A. L. Dawes Settlement has sold 50,000 shares at 10½p; the N. G. K. Dawes Settlement has sold 50,000 shares at 10½p.

H. P. Bulmer — A trust of which directors G. M. Bulmer and D. E. Bulmer are joint trustees, purchased 250,000 ordinary.

Manson Finance Trust — Hong Leong Assurance Sendirian Berhad (a member of the Hong Leong Group) has acquired 352,000 ordinary shares and holds 15.44m ordinary (63 per cent).

Property Security Investment Trust — L. N. Tucker, a director, is interested in a further 506,250 ordinary and his total interests are 2.54m ordinary shares and 800 preference.

Midland Industries — Mrs D. B. Webb, wife of Major M. J. Webb, a non-executive director, has sold a total of 60,000 shares. In addition, Major Webb's company — Astwood (Finance & Services) has sold 10,000 shares.

London Merchant Securities — F. G. Nash, a director, has sold 11,000 ordinary shares at 67p and now holds 121,044 ordinary and 68,016 deferred ordinary shares.

The Second Alliance Trust — The Standard Life Assurance Company has sold 135,000 ordinary shares and [illegible] ordinary stock units and holds 1.141m ordinary stock units (5.95 per cent).

FINANCIAL TIMES STOCK INDICES

	Mar. 2	Mar. 1	Feb. 29	Feb. 28	Feb. 27	Feb. 24	1983/84 High	1983/84 Low	Since Compilatn High	Since Compilatn Low
Government Secs.	83.12	82.87	82.84	82.72	82.49	82.39	83.77	77.00	127.4	49.18
Fixed Interest	86.81	86.69	86.62	86.86	86.81	85.90	87.47	79.03	150.4	50.53
Industrial Ord	838.9	828.5	819.8	819.1	819.1	816.8	840.5	598.4	840.6	49.4
Gold Mines	675.5	672.3	665.8	672.2	652.5	656.6	734.7	444.6	734.7	43.5
FT-Act All-Share	501.49	496.06	493.12	493.42	495.46	491.30	504.73	382.22	504.73	61.92
FT-SE 100	1060.7	1046.1	1040.3	1038.2	1041.3	1036.9	1075.9	997.6	1075.9	987.5

Order books higher at Allied Textiles as demand holds up

ORDER books for most of the businesses of Huddersfield-based Allied Textile Companies are currently better than at this time last year, says Mr C. Russell Smith in his first annual statement as chairman.

The improved trading conditions which arose in the 12 months to September 30, 1983, when pre-tax profits rose by £310,000 to £3.5m, are still evident in most parts of the group, he reports; adding that he believes they have benefited from the lower value of the pound.

As regards the future, he says the group continues to investigate opportunities to acquire other textile businesses, but regularly finds the likely returns compare unfavourably with those available from financial investments with minimal risk.

Opportunities for increasing the companies textile activities, he says, are likely to continue to stem from organic growth in the manufacture of speciality textiles and goods for non-apparel end use.

He concludes that the group's traditional business is generally more stable than for some years past, with reasonable balance between supply and demand, but with no readily identifiable prospects for significant growth.

As reported on February 1, the company's profit improvement for 1982/83 was achieved on lower turnover of £26.06m against £27.77m. A geographical analysis of this, published in the annual report, shows (£000s omitted): UK £19,629 (£18,819), Continental Europe £3,119 (£3,254), the Middle East £1,195 (£3,290), the Far East £1,489 (£1,672) and other areas £627 (£740).

In their statement, the auditors draw attention to accounting policies used. These indicate that the break up value concept has been applied to the financial statements of certain activities which continue to be under threat of closure because of the current economic situation.

The auditors say they have been unable to verify provisions, totalling £165,000 before tax, made by the directors as part of the extraordinary items charged in the profit and loss account to cover the estimated costs of further rationalisation which it is considered will take place during 1984.

The balance sheet at September 30 1983 shows the company with shareholders' funds up from £15.28m to £20.42m. Fixed assets totalled £2.79m (£2.9m) and net current assets were £19.44m (£17.09m), with investments up from £9.62m to £11.77m.

BOARD MEETINGS

The following companies have notified dates of Board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available as to whether the dividends are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TODAY

Interims: J. & J. Makin Paper Mills, News International, Parker Knoll.

Finals: Barclays Bank, Black and Edgington, British Vita, East Rand Consolidated, Isle of Man Enterprises, Johnstone's Paints, New Equipment, Novo Industri A/S, Ransomes Sims and Jefferies.

FUTURE DATES

Interims:

Bejam	Mar 15
Grosvenor	Mar 8
Harmony Gold Mining	Mar 9
London & Prov Shop Centres	Apr 4
Staffordshire Potteries	Mar 22
Thomas Nationwide Transport	Mar 23
Zambia Copper Investments	Mar 8

Finals:

Antofagasta	Mar 8
Bassons Crispe	Mar 8
Corah	Mar 8
Early's of Witney	Mar 28
Hurst (Charles)	Mar 30
London Atlantic Inv Tst	May 17
Macfarlane (Clansman)	Mar 29
Robinson Bros (Ryders Green)	Mar 13

BASE LENDING RATES

A.B.N. Bank	9 %	Heritable & Gen. Trust	9 %
Allied Irish Bank	9 %	■ Hill Samuel	§9 %
Amro Bank	9 %	C. Hoare & Co.	†9 %
Henry Ansbacher	9 %	Hongkong & Shanghai	9 %
Armco Trust Ltd.	9 %	Kingsnorth Trust Ltd.	10 %
Associates Cap. Corp.	9½%	Knowsley & Co. Ltd.	9½%
Banco de Bilbao	9 %	Lloyds Bank	9 %
Bank Hapoalim BM	9 %	Mallinhall Limited	9 %
BCCI	9 %	Edward Manson & Co.	10 %
Bank of Ireland	9 %	Meghraj and Sons Ltd.	9 %
Bank Leumi (UK) plc	9 %	Midland Bank	9 %
Bank of Cyprus	9 %	■ Morgan Grenfell	9 %
Bank of Scotland	9 %	National Bk. of Kuwait	9 %
Banque Belge Ltd.	9 %	National Girobank	9 %
Banque du Rhone	10 %	National Westminster	9 %
Barclays Bank	9 %	Norwich Gen. Tst.	9 %
Beneficial Trust Ltd.	10 %	R. Raphael & Sons	9 %
Bremar Holdings Ltd.	10 %	P. S. Refson & Co.	9 %
Brit. Bank of Mid. East	9 %	Roxburghe Guarantee	9½%
■ Brown Shipley	9 %	Royal Trust Co. Canada	9 %
CL Bank Nederland	9 %	■ J. Henry Schroder Wagg	9 %
Canada Perm't Trust	10 %	Standard Chartered	■9 %
Castle Court Trust Ltd.	9½%	Trade Dev. Bank	9 %
Cayzer Ltd.	9 %	TCB	9 %
Cedar Holdings	9 %	Trustee Savings Bank	9 %
■ Charterhouse Japhet	9 %	United Bank of Kuwait	9 %
Cheulartons	10½%	United Mizrahi Bank	9 %
Citibank Savings	¶10½%	Volkskas Intnl. Ltd.	9 %
Clydesdale Bank	9 %	Westpac Banking Corp.	9 %
C. E. Coates	9½%	Whiteaway Laidlaw	9½%
Comm. Bk. of N. East	9 %	Williams & Glyn's	9 %
Consolidated Credits	9 %	Wintrust Secs. Ltd.	9 %
Co-operative Bank	*9 %	Yorkshire Bank	9 %
The Cyprus Popular Bk.	9 %		
Dunbar & Co. Ltd.	9 %		
Duncan Lawrie	9 %		
E. T. Trust	9½%		
Exeter Trust Ltd.	10 %		
First Nat. Fin. Corp.	11 %		
First Nat. Secs. Ltd.	10½%		
Robert Fraser	10 %		
Grindlays Bank	‡9 %		
■ Guinness Mahon	9 %		
■ Hambros Bank	9 %		

■ Members of the Accepting Houses Committee. * 7-day deposits 5.5%, 1-month 5%. Fixed rate 12 months £2,500 at 9%, £10,000 12 months 9.5%. † 7-day deposits on sums of: under £10,000 5¾%, £10,000 up to £50,000 6¼%, £50,000 and over 7¼%. ‡ Call deposits £1,000 and over 5½%. § 21-day deposits over £1,000 6½%. ¶ Demand deposits 5¾%. ¶ Mortgage base rate.

RECENT ISSUES

EQUITIES

Stock	Issue price, amount paid up, latest renunc. date, 1983/84 high/low, closing price, +or−, net div., times covered, gross yield, P/E ratio
Aberfoyle Hldgs. 5p	[illegible]
Assoc. EnergySer. 5p	[illegible]
Brint Invs.	[illegible]
CML Micro'sms 10p	[illegible]
Cable & Wireless 50p	[illegible]
Ciroprint Hldgs 10p	[illegible]
Desmans Electrical	[illegible]
Dewey Warren 10p	[illegible]
Gibbs Mew	[illegible]
Grovewood	[illegible]
Hambros Inv. Tst. War.	[illegible]
Kent (John) 5p	[illegible]
LPA Inds. 10p	[illegible]
Morceau Hldgs. 10p	[illegible]
Morgan Comm. 5p	[illegible]
Norbain Electro's 5p	[illegible]
Petranol 10p	[illegible]
Radio Clyde NV	[illegible]
Sangers Photo. 10p	[illegible]
Shires Inv. Warrants	[illegible]
Uelbond	[illegible]
Xyllyx 10p	[illegible]

FIXED INTEREST STOCKS

Stock	Issue price, amount paid up, latest renunc. date, 1983/84 high/low, closing price, +or−
Asian Dev. Bk. 10¼% Ln. 2008	[illegible]
Brixton Est. 11¾% 1st Mort. Deb. 2015	[illegible]
Bulmer (H.P.) 8¾% Cnv. Cum. Prf.	[illegible]
EIB (U.K.) 12¼% [illegible]	[illegible]
Grainger Tst. 11¾% 1st Mort. Deb. 2024	[illegible]
Hanson Tst. 9½% Cnv. Un. Ln. 2001-06	[illegible]
Int. Bk. for Rec. & Dev. 11½% Ln. 2003	[illegible]
Lon. Shop Prop. 9pc Cnv. 94-98	[illegible]
MEPC 10¾% 1st. Mort. Deb. 2024	[illegible]
Mid-Southern Wtr. 6½% Red. Prf. 1991	[illegible]
Nationwide 10¼% Bds. 28/1/85	[illegible]
Do. 10¼% Bds. 1986	[illegible]
Province of Quebec 12¼% Ln. 2020	[illegible]
Queens Moat 12⅛% 1st Mort. Deb. 2013	[illegible]
Rochdale Met. Bor. 11% Red. 2006	[illegible]
Scot. Northern Inv. Tst. 11¼% Deb. 2013	[illegible]
Slough Ests. 12¼% Uns. Ln. 2009	[illegible]
Swale 12¾% Ln. 1989	[illegible]
TR City of London 11¼pc Deb. 2014	[illegible]

"RIGHTS" OFFERS

Stock	Issue price, amount paid up, latest renunc. date, 1983/84 high/low, closing price, +or−
Applied Computer 10p	[illegible]
Broken Hill Prop. A$2	[illegible]
East Dagga Options	[illegible]
[illegible]	[illegible]
Higgs & Hill	[illegible]
[illegible]	[illegible]
Micro Focus 10p	[illegible]
[illegible]	[illegible]
Sheafbank Property 10p	[illegible]
Sketchley	[illegible]

Renunciation date usually last day for dealing free of stamp duty. b Figures based on prospectus estimates. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. g Assumed dividend and yield. u Forecast dividend cover based on previous year's earnings. F Dividend and yield based on prospectus or other official estimates for 1984. H Dividend and yield based on prospectus or other official estimates for 1983-84. Q Gross. p Pence unless otherwise indicated. ¶ Issued by tender. ‖ Offered to holders of ordinary shares as a "rights." ** Issued by way of capitalisation. §§ Reintroduced. ¶¶ Issued in connection with reorganisation merger or take-over. ‖‖ Allotment letters (or fully-paid). ■ Introduction. * Unlisted Securities Market. § Placing price. †† Official London Listing. ‡ No par value.

PENDING DIVIDENDS

Company	Date	Announcement last year
Adwest	Apr 15	Interim 2.1
Anglo American Inv Trust	Apr 14	Final 440c
Argyll Foods	Mar 21	Interim 0.35
Ass Brit Ports	Apr 14	Final due
Automotive Products	Apr 15	Final nil
Bat Inds	Apr 7	Final 15.0
BCA	Apr 17	Interim 2.0
*BICC	Mar 21	Final 7.04
BP	Mar 17	Final 14.0
BPCC	Mar 21	Final 5.09
BTR	Mar 21	Final 8.25
Babcock Intl	Mar 30	Final 3.5
*Barclays Bnk	Mar 6	Final 11.0
*Barratt Developts	Mar 13	Interim 4.2
*Bejam	Mar 15	Interim 1.5
Bell (A.)	Mar 23	Interim 2.0
*Bibby (J.)	Mar 20	Final 5.15
Blackwood Hodge	Apr 15	Final nil
Boddingtons' Brews	Mar 10	Final 2.25
Booker McConnell	Mar 29	Final 2.25
Bowater	Mar 29	Final 3.5
[illegible]	[illegible]	[illegible]

* Board meeting intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made. ¶ Forecast.

Company	Price, change on week, gross div. (p), yield %, P/E actual, fully taxed
Ass. Brit. Ind. Ord.	[illegible]
Ass. Brit. Ind. CULS	[illegible]
Airsprung Group	[illegible]
Armitage & Rhodes	[illegible]
Bardon Hill	[illegible]
Bray Technologies	[illegible]
CCL Ordinary	[illegible]
CCL 11pc Conv. Pref.	[illegible]
Carborundum Abrasives	[illegible]
Cindico Group	[illegible]
Deborah Services	[illegible]
Frank Horsell	[illegible]
Frank Horsell Pr Ord 87	[illegible]
Frederick Parker	[illegible]
George Blair	[illegible]
Ind. Precision Castings	[illegible]
Isis Conv. Pref.	[illegible]
Jackson Group	[illegible]
James Burrough	[illegible]
Minihouse Holding N.V.	[illegible]
Robert Jenkins	[illegible]
Scruttons "A"	[illegible]
Torday & Carlisle	[illegible]
Travian Holdings	[illegible]
Unilock Holdings	[illegible]
Walter Alexander	[illegible]
W. S. Yeates	[illegible]

Closing prices March 2

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

12 Month High	12 Month Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
19¾	6⅝	AAR	.44	2.2	35	198	u20¼	19¾	20⅛	+ ⅛
52⅞	30½	ACF	1.40	3.0	[illegible]	60	47⅞	47	47	− ⅛
22	17⅝	AMCA	s 1	5.7		9	17⅝	d17½	17½	− ⅛
18⅝	14⅝	AMF	.50	3.5		873	14⅝	14⅛	14¼	
41¼	21	AMR Cp			7	6564	32¼	32⅛	32⅛	+ ⅛
20⅝	16⅝	AMR	pf2.18	11.		34	19	18⅞	19	
41⅞	26⅝	AMR	pf2.12	6.9		228	34½	34¼	34¼	+ ⅛
20¾	23⅞	ANR	pf2.67	11.		2	24⅝	24⅝	24⅝	− ⅛
16⅝	6⅝	APL			3	35	11¼	11	11⅛	+ ⅛
55¾	40	ARA	2.05	4.8	16	438	44½	43⅝	44¼	− ⅛
77¼	50¾	ASA	3a	4.4		800	69	20⅝	68⅝	+ ⅛
33¼	14½	AVX	s .32	1.4	24	295	23½	22⅞	23⅛	+ ⅜
53⅞	40⅝	AbtLab	1	2.5	14	2150	42½	40¾	40⅝	−1⅛
50¾	23¾	AccoW	s.60	2.3	18	207	26⅝	25½	26⅛	+ ½
27½	17¼	AcmeC	.40	1.8		322	22½	22¼	22¼	− ¼
16	6¼	AcmeE	.32b	3.3	31	19	9¾	9½	9¾	+ ⅛
24⅝	6¾	AdmDg	.04	.3	12	104	16⅛	15½	16	+ ⅛
18⅝	15⅛	AdaEx	2.114	13.		157	16¼	15⅝	15⅞	− ⅛
19⅝	7⅞	AdmMI	.28	1.5	9	24	18½	18¼	18¼	
18⅞	8⅞	Advest	.12	1.1	16	80	11⅞	11⅝	11⅝	
37½	15½	AMD	s		36	5809	30½	28¾	35	− ⅛
24⅝	12½	Aeriflx	s		15	70	14⅞	14⅛	14⅞	
43½	33¾	AetnLf	2.64	7.9	10	1466	34⅝	34	34¼	+ ⅛
62¾	55¼	AetL	pf5.28e	9.2		30	57⅞	56⅞	57⅞	+1
40½	30	Ahmns	1.20	6.2	6	2853	24⅝	22¼	35	+ ⅛
7¼	3	Aileen				14	4⅝	4½	4½	− ¼

Continued on Page 21

AMERICAN STOCK EXCHANGE COMPOSITE CLOSING PRICES

Closing prices March 2

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]										

Continued on Page 22

NEW YORK STOCK EXCHANGE COMPOSITE CLOSING PRICES

Continued from Page 20

12 Month High	Low	Stock	Div.	Yld.	P/E	Sls 100s	High	Low	Close Quote	Ch'ge Prev. Close
[illegible]										
52¼	26	Weyr	pf2.80	7.0		26	40¼	40	40¼	+ ¼
57¼	46¾	Weyr	pr4.30	9.1		38	49⅝	49¼	49½	+ ⅛
83	80	WhelLE	5.75	7.6		z210	76	74¼	76	−3
35⅞	17⅞	WhelPit				14	29¾	29½	29⅝	+ ⅛
46	38	WhPit	pf 6	14.		z10	42	42	42	+ ½
38	30¼	WhPit	pf 5	14		z10	34½	34½	34½	−1
57	40	Whirlpl	2	4.8	9	2271	41¼	40¾	41⅛	+ ⅛
48¾	34	WhitC	1.80	4.3	11	250	35¼	34¼	35⅛	+ ¼
43½	35¼	WhitC	pfC3	7.6		7	39½	39⅛	39⅛	+ ⅛

Continued on Page 22

Sales figures are unofficial. Yearly highs and lows reflect the previous 52 weeks plus the current week, but not the latest trading day. Where a split or stock dividend amounting to 25 per cent or more has been paid, the year's high-low range and dividend are shown for the new stock only. Unless otherwise noted, rates of dividends are annual disbursements based on the latest declaration.

a–dividend also extra(s). b–annual rate of dividend plus stock dividend. c–liquidating dividend. cld–called. d–new yearly low. e–dividend declared or paid in preceding 12 months. g–dividend in Canadian funds, subject to 15% non-residence tax. i–dividend declared after split-up or stock dividend. j–dividend paid this year, omitted, deferred, or no action taken at latest dividend meeting. k–dividend declared or paid this year, an accumulative issue with dividends in arrears. n–new issue in the past 52 weeks. The high-low range begins with the start of trading. nd–next day delivery. P/E–price-earnings ratio. r–dividend declared or paid in preceding 12 months, plus stock dividend. s–stock split. Dividends begins with date of split. sls–sales. t–dividend paid in stock in preceding 12 months, estimated cash value on ex-dividend or ex-distribution date. u–new yearly high. v–trading halted. vi–in bankruptcy or receivership or being reorganised under the Bankruptcy Act, or securities assumed by such companies. wd–when distributed. wi–when issued. ww–with warrants. x–ex-dividend or ex-rights. xdis–ex-distribution. xw–without warrants. y–ex-dividend and sales in full. yld–yield. z–sales in full.

WORLD STOCK MARKETS

OVER-THE-COUNTER Nasdaq National Market closing prices

Closing prices March 2

CANADA

1983-84 High	Low	Stock	Mar. 2
30⅛	18⅞	AMCA Intl	21¾
27⅛	15¼	Abitibi	25¾
25⅞	14⅛	Agnico Eagle	19¼
21	17⅛	Alberta Energy	18⅝
50¾	33⅛	Alcan Aluminium	41⅞
37⅛	24¾	Algoma Steel	27¼
33⅝	56	Bank Montreal	26¾
13⅛	50⅝	Bank NovaScotia	13¼
33⅝	22⅛	Bell Canada	31½
12⅛	13¼	Bombardier	17
29⅝	16⅛	Bow Valley	25
27	20	BP Canada Res	23
41¾	19⅝	Brascan A	36⅛
4.20	2.16	Brinco	9.31
14⅛	6¼	B.C. Forest	12¼
33⅝	23⅛	CIL Inc	29½
11¼	8	CadillacFairview	11¼
41⅛	26	Campbell Red Lk	36⅝
18⅛	12¼	Can. Cement Pf	14¾
33¾	92⅛	Can. NW Energy	60¼
35	12⅛	Can. Packers	27
50	35⅛	Can. Trustco	46⅞
42	22⅛	Can.Imp.Bank	35⅛
53¼	33⅞	Can. Pacific	45¾
25¾	18	Can. Pac. Ents	22¼
13¾	10⅛	Can. Tire A	11⅞
27⅝	21½	Canfor	22½
24¾	11⅜	Carling O'Kfe	21¾
12⅞	14	Chieftain	18⅜
64⅛	44¾	Cominco	56¼
29	16	Cons. Bathst. A	26¾
5.5	1.4	Copper Lake	6.20
10¾	6½	Costain	2⅞
23¼	12⅛	Denison Mines A	21⅜
20⅞	8¼	Dofasco	17½
25⅛	13⅞	Dome Mines	20
6⅞	3.25	Dome Petroleum	4.25
22⅝	12	Dominion Strs	19½
34⅞	20	Domtar	32⅛
87	47¾	Falconbridge	84¾
35¼	20¼	Genstar	25⅛
92¾	12⅛	Giant Y'knife	25
3.10	1.85	Gt. West Life	3.00
25¾	13⅛	Gulf Canada	18¾
21	14⅝	Hawker Sid. Can.	17⅛
93⅛	18¼	Hudson's Bay	21⅞
13¼	6¼	Husky Oil	15⅝
38¼	28¾	Imasco	34⅞
41¼	27	Imperial Oil A	37⅞
29¾	13⅝	Inco	17¼
13¾	7¾	Indal	11⅛
34	21¼	Int. Pipe	28⅞
38	12	LACMinerals	35⅝
15¼	2¼	Loblaw	14¾
34⅝	24	Macmill. Bloedel	39
16	9	Marks & Spencer	14
7⅝	3.70	Massey Ferguson	4.55
46¼	22½	McIntyre Mines	38⅜
37¼	13⅝	Mitel Corpn	14⅛
25⅛	17¼	Molson A	19⅝
63	47¾	Moore Corp	47¾
11¾	6⅛	Nat. Sea Prods A	6
28¾	19⅛	Noranda Mines	23⅛
20⅛	12	Norcen Energy	17
80½	27⅞	Nth. Telecom	44⅝
2¼	5¼	Nova Alberta	5⅛
14⅛	5⅞	Numac Oil	16
19⅞	6½	Oakwood Pet.	2¾
35¼	2¼	Pan Can Pet	23¾
25⅛	2	Patino	10
28⅛	19⅝	Placer Dev	32⅛
21¾	12⅝	Power Corp	19⅜
10¾	2⅞	QuebecSturgeon	2¾
13¾	7¼	Ranger Oil	11⅛
17	11⅞	Reed Stenhs A	12¾
20⅛	12½	Rio Algom	17⅛
35⅞	26¼	Royal Bank	59⅜
30	12	Royal Trust A	26¼
7¾	4.95	Sceptre Res	5⅛
42¼	33⅝	Seagram	44¼
29¼	20	Shell Canada Oil	23⅝
12	7	Simpson Sears A	8⅞
33⅛	21	Stelco	27⅛
15⅛	9¼	Teck B	10⅛
42½	28	Texaco Canada	40
40¼	27⅜	Thomson News A	38⅜
[illegible]	[illegible]	Toronto Dom Bk	[illegible]
[illegible]	[illegible]	Transalta A	[illegible]
[illegible]	[illegible]	Trans Can Pipe	[illegible]
[illegible]	[illegible]	Walker Hiram	[illegible]
[illegible]	[illegible]	Westcoast Trans	[illegible]
[illegible]	[illegible]	Weston (Geo)	[illegible]

NORWAY

AUSTRALIA

HONG KONG

JAPAN

ITALY

NETHERLANDS

FRANCE

AUSTRIA

BELGIUM/LUXEMBOURG

DENMARK

GERMANY

SWEDEN

SINGAPORE

SWITZERLAND

SOUTH AFRICA

SPAIN

Continued on Page 23

AMERICAN STOCK EXCHANGE CLOSING PRICES

Continued from Page 21

NEW YORK CLOSING PRICES

Continued from Page 21

WORLD STOCK MARKETS

Indices

NEW YORK — DOW JONES

	Mar. 2	Mar. 1	Feb. 29	Feb. 28	Feb. 27	1983-84 High	1983-84 Low	Since Compil'n High	Since Compil'n Low
Industrials	1171.48	1159.44	1154.63	1157.14	1173.38	1287.20 (29/11)	1027.04 (3/1/83)	1287.20 (29/11/83)	41.22 (2/7/32)
H'me Bnds	70.24	70.15	70.29	70.21	70.45	77.64 (8/5)	65.85 (3/8)		
Transport	520.58	515.82	511.11	510.91	520.47	612.63 (9/1/84)	454.36 (3/1/83)	612.63 (9/1/84)	12.32 (8/7/32)
Utilities	129.38	128.85	127.79	126.61	128.40	140.70 (3/1/83)	119.51 (17/1/83)	163.32 (20/4/69)	10.5 (28/4/42)
Trading Vol 000's	108,27	82,010	92,910	91,010	93,140				

Day's high 1181.01 (1166.46) low 1163.31 (1146.25)

	Feb. 24	Feb. 17	Feb. 10	Year ago (approx)
Industrial div. yield %	4.73	4.78	4.71	4.86

STANDARD AND POORS

	Mar. 2	Mar. 1	Feb. 29	Feb. 28	Feb. 27	1983-84 High	1983-84 Low	Since Compil'n High	Since Compil'n Low
Industrials	179.61	178.58	177.83	177.35	180.88	194.84 (10/10)	154.98 (3/1/83)	194.84 (10/10/83)	3.62 (30/6/32)
Comp'site	158.24	158.18	157.08	156.02	158.29	172.65 (10/10)	138.34 (3/1/83)	172.65 (10/10/83)	4.40 (1/6/32)

	Feb. 29	Feb. 22	Feb. 15	Year ago (approx)
Industrial div. yield %	4.01	4.06	4.03	4.92
Industrial P/E ratio	12.82	12.60	12.78	11.69
Long Gov. Bond yield	11.98	11.89	11.75	10.36

N.Y.S.E. ALL COMMON

Mar. 2	Mar. 1	Feb. 29	Feb. 28	1983-84 High	1983-84 Low
91.67	91.07	90.44	90.34	99.63 (10/10)	80.02 (24/1/83)

Rises and Falls

	Mar. 2	Mar. 1	Feb. 29
Issues Traded	1,963	1,980	1,957
Rises	1,071	962	850
Falls	521	576	669
Unchanged	371	381	399
New Highs	12	19	15
New Lows	36	40	[illegible]

MONTREAL

	Mar. 2	Mar. 1	Feb. 29	Feb. 28	1983-84 High	1983-84 Low
Industrial	461.43	459.52	426.88	424.08	468.90 (26/9)	381.10 (4/1/83)
Combined	412.21	416.54	411.16	461.41	441.23 (26/6)	378.15 (4/1/83)
TORONTO Composite	2426.1	2418.5	2419.8	2460.0	2589.2 (26/6)	1949.6 (4/1/83)

NEW YORK ACTIVE STOCKS

Friday	Stocks traded	Closing price	Change on day		Stocks traded	Closing price	Change on day
Occid Petrol	3,265,000	111/4	+1/4	Ford Motor	1,141,600	33	+1/4
Gulf Oil	3,238,400	69	—	Pfizer	1,127,400	381/4	+1/4
Texaco	3,077,900	421/2	+1/4	Squibb	1,064,200	171/4	—
ATT	1,548,700	173/8	+1/4	Mobil	1,058,400	311/4	—
Atl Richfield	1,158,400	441/4	+1/4	IBM	1,000,000	112	+1/4

	Mar. 2	Mar. 1	Feb. 29	Feb. 28	1983-84 High	1983-84 Low
AUSTRALIA All Ord. (1/1/80)	729.3	728.1	737.6	740.6	787.9 (9/1/84)	487.8 (4/1/83)
Metals & Mnls. (1/1/80)	499.1	498.0	506.3	521.9	614.2 (6/9)	411.5 (4/1/83)
AUSTRIA Credit Aktien (2/1/62)	56.28	56.26	55.35	55.43	58.8 (5/5)	48.58 (15/2/83)
BELGIUM Belgian SE (31/12/63)	140.41	140.15	140.46	141.35	140.95 (1/2/84)	100.58 (4/1/83)
DENMARK Copenhagen SE (1/1/83)	185.5	191.34	194.34	195.05	225.21 (20/1/84)	100.00 (3/1/83)
FRANCE CAC General (31/12/82)	163.4	162.1	169.2	162.7	175.1 (25/1/84)	95.1 (3/1/83)
Ind Tendance (30/12/83)	105.4	104.9	108.2	104.3	114.7 (25/1/84)	99.4 (3/1/84)
GERMANY FAZ-Aktien (31/12/58)	351.74	350.81	348.40	356.84	378.84 (2/2/84)	241.99 (25/1/83)
Commerzbank (1/12/53)	1034.4	1030.9	1020.0	1031.5	1090.5 (2/1/84)	737.5 (25/1/83)
HONG KONG Hang Seng Bank (31/7/64)	1078.65	1061.40	1069.29	1041.55	1134.12 (6/2/84)	690.06 (4/10)
ITALY Banca Comm Ital. (1972)	221.37	210.52	219.54	220.90	229.17 (1/2/84)	160.43 (10/1/83)
JAPAN** Nikkei-Dow (16/5/49)	9848.48	9826.27	10038.7	10078.8	10289.7 (30/1/84)	7803.18 (25/1/83)
Tokyo SE New (4/1/68)	773.57	769.11	776.12	776.90	713.60 (27/2/84)	574.51 (25/1/83)
NETHERLANDS ANP-CBS General (1970)	131.0	130.4	130.3	130.4	133.9 (1/2/84)	100.1 (4/1/83)
ANP-CBS Indust (1970)	122.0	121.9	121.5	121.1	141.2 (1/2/84)	93.5 (4/1/83)
NORWAY Oslo SE (4/1/83)	250.83	247.65	246.90	249.01	258.65 (3/3/84)	93.01 (4/1/83)
SINGAPORE Straits Times (1966)	1021.60	1018.03	1017.83	1022.60	1071.31 (6/2/84)	712.29 (5/1/83)
SOUTH AFRICA Gold (1958)	—	1015.5	1018.8	1031.4	1083.5 (11/2/83)	661.4 (1/11)
Industrial (1958)	—	990.0	981.1	984.3	1000.4 (6/1/84)	794.5 (6/1/83)
SPAIN Madrid SE (30/12/83)	119.62	110.10	111.11	116.42	119.62 (2/3/84)	100.00 (30/12/83)
SWEDEN Jacobson & P. (1/1/58)	1520.14	1501.72	1493.72	1504.95	1584.5 (5/1/84)	896.19 (5/1/83)
SWITZERLAND Swiss Bank Cpn. (31/12/58)	387.9	381.1	386.2	370.0	388.1 (5/1/84)	294.4 (4/1/83)
WORLD Capital Intl. (1/1/70)	181.90	—	181.5	181.7	191.2 (20/1/84)	154.3 (5/1/83)

**Saturday February 25: Japan Nikkei-Dow 10,049.05, TSE 778.07.

Base values of all indices are 100 except Australia All Ordinary and Metals—500, NYSE All Common—50; Standard and Poors—10; and Toronto—1,000: the last named based on 1975. † Excluding bonds. ‡ 400 Industrials. § 400 Industrials plus 40 Utilities, 40 Financials and 20 Transports. c Closed. u Unavailable.

OVER-THE-COUNTER Nasdaq National Market

Continued from Page 22

Stock	Sales (Hnds)	High	Low	Last	Chng
[illegible]					
ThouTr	605	223/4	221/2	223/4	+1/4
TomFib	80	93/4	93/4	93/4	
Tipary 1	225	61/2	6	6	-3/8
Tocom	140	2	17/8	17/8	-1/8
US Sur	358	133/4	133/4	133/4	
US Tr 1.60	200	38	373/4	38	-1/8
UnTelev	66	133/4	131/2	133/4	+1/8
UVaBs s 1.28	16	283/8	273/4	283/8	+1/8
WkoTel	152	87/8	8	87/8	+1/8
WshE 1.60	139	153/4	153/4	153/4	
WFSL s	150	183/4	18	183/4	+5/8
WMSB	16	111/8	111/8	111/8	-1/8
YlowFt .92	596	341/2	333/4	333/4	+1/2
ZenLbB	102	141/2	141/4	141/2	
Zentec	33	6	5	6	
Zondv s .30	13	155/8	153/8	155/8	

CONTRACTS & TENDERS

COMPANY NOTICES

FT UNIT TRUST INFORMATION SERVICE

AUTHORISED UNIT TRUSTS

[illegible]

INSURANCES

[illegible]

Insurances—continued

[illegible]

Colonial Mutual Group
24 Ludgate Hill, EC4P 4BD. 01-248 9861
Capital Life Assurance

Key Inv Fd	—	127.95	....	—
Pcmkr Inv Fd	—	126.46	....	—
Equity Fd	109.86	115.64	....	—
Fxd Int Fd	108.63	111.21	....	—
Prooty Fd	192.92	108.44	....	—
Cash Fd	191.43	106.70	....	—
Managd Fd	111.37	117.23	....	—

Col Mut Life (Pension Annuities)

MenPnA/8	105.89	111.48	+4.01	—
MoPCIA/9	106.32	111.93	+4.09	—

Commercial Union Group
St Helens, 1 Undershaft, EC3. 01-283 7500

VarAnMar9	—	34.44	−0.04	—
VarAnMar9	—	34.44	−0.04	—

Prime Series—Life

Managed	133.8	140.0	+0.4	—
UK Equity	139.6	147.9	+0.7	—
Int Equity	124.4	131.0	+9.4	—
Property	104.7	110.3	....	—
Fixed Int	114.1	120.2	+0.4	—

Offshore & Overseas—continued

[illegible]

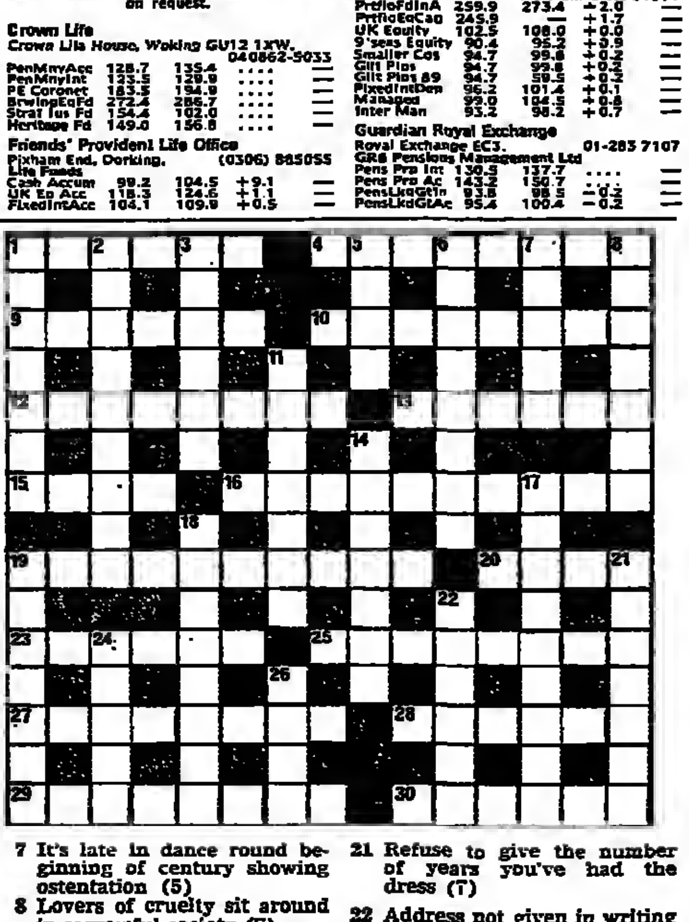
Money Market Trust Funds

[illegible]

Money Market Bank Accounts

[illegible]

F.T. CROSSWORD PUZZLE No. 5,358



ACROSS

1 Sporting "matter"? (6)
4 A 1 across 15 (8)
9 Get-togethers in 1 across (6)
10 Ring provided in a rush is revoked (8)
12 Top of the bill to begin with tea provider (4, 4)
13 The position from which to declare us to en audience (6)
15 A 1 across this is 15! (4)
16 A 1 across 15 (10)
19 A 1 across 15 (10)
20 Slow-moving lump (4)
23 N. American Indian takes in pop (6)
25 Clip more bits in collage for puzzle-maker (8)
27 Taken in by hard stuff? (Not in reality) (2, 6)
28 Old kingdom's race I'm upsetting (6)
29 Maybe, maybe not (3, 3, 2)
30 Pure, but hunted, we hear (6)

DOWN

1 Stands firm, is up in breaks (7)
2 European red climbing plant (9)
3 New York time could be seen as antagonism (6)
5 Assert positively but partly wavering (4)
6 Drink a politician makes is dependent on chance (8)
7 It's late in dance round beginning of century showing ostentation (5)
8 Lovers of cruelty sit around in sorrowful society (7)
11 Vessel in a drink is secret (7)
14 Desert a musical group performing (7)
17 A 1 across 15 (3, 6)
18 H9re's a word for cutting out (8)
19 In children's works it's often this ever after (7)
21 Refuse to give the number of years you've had the dress (7)
22 Address not given in writing (6)
24 A 1 across 15 (5)
26 A British member of 1 across 15? (4)

The solution to last Saturday's prize puzzle will be published with names of winners next Saturday

INSURANCE & OVERSEAS MANAGED FUNDS

Black Horse Life Ass. Co. Ltd.
71, Lombard St., EC3. 01-623 1288

Black Horse Man. Fd.	248.57		-2.35	—
Managed Inv. Fd.	167.09	176.74	+0.38	—
Property Fd.	153.56	161.65	-0.47	—
Fixed Interest Fd.	149.17	157.03	+0.30	—
Cash Fd.	138.42	145.71	-0.47	—
Income Fd.	[illegible]	[illegible]	[illegible]	—

[illegible]

G.T. Management Ltd.
16 Finsbury Circus, Lond EC2M 7DJ 01-628 8131

G.T. Plan Bond Fund	122.5	129.0	+1.0	—
GT Pln High Yld Fd	131.1	138.0	+0.2	—
GT Plan Far East Fnd	127.8	134.6	-0.1	—
GT Plan N. Am Fd	125.3	132.2	+1.7	—

[illegible]

Lloyds Life Assurance—cont.

[illegible]

Property Growth Assur. Co. Ltd.
Leon House, Croydon CR9 1LU. 01-680 0606

Property Fund		291.3	+0.9
Property Fund (A)		282.9	+0.8
Agricultural Fund		1,143.9	+5.9
Agric. Fund (A)		1,112.5	+5.4
Abbey Nat. Fund		233.0	+0.9

[illegible]

Standard Life Assurance Company
3 George St., Edinburgh EH2 2XZ. 031-225 2552.

Managed	210.7	221.8	+0.8
Property	134.8	143.0	—
Equity	254.6	268.1	+0.3
International	190.0	200.5	+2.0
Fixed Interest	175.3	184.6	+0.6

[illegible]

Bank of America International S.A.
35 Boulevard Royal, Luxembourg G.D.
Worldinvest Inc. | $117.89 | 118.49 | ..... | 6.78
Valued weekly on Wednesdays.

Barclays Unicorn International
1, Charing Cross, St. Helier, Jersey. 0534 73741

[illegible]

Hambro Pacific Fund Mgmt. Ltd.
2110, Connaught Centre, Hong Kong

Far East Feb 27	$4.51	4.86	.....	—
Japan Fd Feb 23	$16.97	18.19	.....	—

Hambros Fd. Mgrs. (C.I.) Ltd.
P.O. Box 86, Guernsey. 0481-26521

[illegible]

Richmond Life Ass. Ltd.
4 Hill Street, Douglas, IoM. 0624 23914

[illegible]

OFFSHORE AND OVERSEAS

[illegible]

NOTES

[illegible]

FT LONDON SHARE INFORMATION SERVICE

BRITISH FUNDS

"Shorts" (Lives up to Five Years)

[illegible]

Five to Fifteen Years

[illegible]

Over Fifteen Years

[illegible]

Undated

[illegible]

Index-Linked

[illegible]

INT. BANK AND O'SEAS GOVT. STERLING ISSUES

[illegible]

CORPORATION LOANS

[illegible]

COMMONWEALTH AND AFRICAN LOANS

[illegible]

LOANS

Building Societies

[illegible]

Public Board and Ind.

[illegible]

Financial

[illegible]

FOREIGN BONDS & RAILS

[illegible]

AMERICANS

[illegible]

CANADIANS

[illegible]

BANKS, H.P. AND LEASING

[illegible]

Hire Purchase, Leasing, etc.

[illegible]

BEERS, WINES AND SPIRITS

[illegible]

BUILDING INDUSTRY, TIMBER AND ROADS

[illegible]

CHEMICALS, PLASTICS

[illegible]

DRAPERY AND STORES

[illegible]

DRAPERY—Continued

[illegible]

ELECTRICALS

[illegible]

ENGINEERING

[illegible]

ENGINEERING—Continued

[illegible]

FOOD, GROCERIES, ETC.

[illegible]

HOTELS AND CATERERS

[illegible]

HOTELS—Continued

[illegible]

INDUSTRIALS (Miscel.)

[illegible]

INDUSTRIALS—Continued

[illegible]

INSURANCE

[illegible]

LEISURE

[illegible]

LEISURE—Continued

[illegible]

MOTORS, AIRCRAFT TRADES

Motors and Cycles

[illegible]

Commercial Vehicles

[illegible]

Components

[illegible]

Garages and Distributors

[illegible]

NEWSPAPERS, PUBLISHERS

[illegible]

PAPER, PRINTING, ADVERTISING

[illegible]

PROPERTY

[illegible]

PROPERTY—Continued

[illegible]

SHIPPING

[illegible]

SHOES AND LEATHER

[illegible]

SOUTH AFRICANS

[illegible]

TEXTILES

[illegible]

TOBACCOS

[illegible]

TRUSTS, FINANCE, LAND

Investment Trusts

[illegible]

INVESTMENT TRUSTS—Cont.

[illegible]

Finance, Land, etc.

[illegible]

OIL AND GAS

[illegible]

OIL AND GAS—Continued

[illegible]

OVERSEAS TRADERS

[illegible]

PLANTATIONS

Rubbers, Palm Oil

[illegible]

Teas

[illegible]

MINES

Central Rand

[illegible]

Eastern Rand

[illegible]

Far West Rand

[illegible]

O.F.S.

[illegible]

Finance

[illegible]

Diamond and Platinum

[illegible]

Central African

[illegible]

MINES—continued

Australians

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Yld Gr's
		♥ACM 20c	16½				
		♥Allstate Expl NL	35				
		♥Asia Oil & Mins.	4¼				
		♥Australian Hydrocarbons NL	[illegible]				
		♥Australis Mng. NL	26				
		♥Balmoral Res	31				
		♥Black Hill Mins.	34				
December		♥Bond Corp	96		010c	0.7	7.3
Nov.	Apr.	♥Bougainville 1 Kina	157	11.3	015.5c	♦	6.8
May	Nov	♥CRA $2	330	11.3	012c	♦	2.4
		♥Carr Boyd 20c.	82				
		♥Central Kalgoorlie	35				
		♥Central Pacific	22				
		♥Cons Gold Mng Areas	3½				

[illegible]

Tins

[illegible]

Miscellaneous

Dividends Paid		Stock	Price	Last xd	Div Net	C'vr	Yld Gr's
		♥Admiral Mines	18				
		♥Anglo-Dominion	67				
		♥Anglo Utd. Dev.	59				
		♥Centennial Minerals	317				
		♥Colby Res Corp.	160	-	—	-	-
Aug	Feb	Cons. Murch. 10c	880	16.1	100c	♦	7.3
Feb	Aug	Eastern Trans Cons.50c	£18	30.12	085c	4.9	2.4
Sept	Feb	Hampton Areas 10p	225	30.12	3.75	2.1	2.2
		♥Highwood Res.	380	-	—		-
May	Aug	Homestake Mining $1	£23	2.2	020c		0.6
October		Northgate C$1	320	977	-	-	-
Jan	July	R.T.Z.	662	31.10	t17.0	2.9	3.7
Jan	July	[illegible]	£341	11.10	09½%	32.5	[illegible]
		♥Sabina Inds C$1	90				
		♥Tara Expln. $1	960				

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half yearly figures. P/Es are calculated on "net" distribution basis, earnings per share being computed on profit after taxation and unrelieved ACT where applicable; bracketed figures indicate 10 per cent or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution; this compares gross dividend costs to profit after taxation, excluding exceptional profits/losses but including estimated extent of offsettable ACT. Yields are based on middle prices, are gross, adjusted to ACT of 30 per cent and allow for value of declared distribution and rights.

- ● "Tap" Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Principal and interest tax-free to non-residents on application
- ♦ Figures or report awaited.
- ♥ Not officially UK Listed; dealings permitted under Rule 163(4)(a).
- ✠ USM, not listed on Stock Exchange and company not subjected to same degree of regulation as listed securities
- †† Dealt in under Rule 163(3)
- # Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividend or forecast.
- ♦ Merger bid or reorganisation in progress.
- ✠ Not comparable.
- ♦ Same interim: reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend
- ✠ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ¤ No par value.

B.Fr. Belgian Francs. Fr. French Francs. ¶¶ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock. a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital, cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Subject to local tax. x Dividend cover in excess of 100 times. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. D Issue price. E Minimum tender price. F Dividend and yield based on prospectus or other official estimates for 1983-84. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1984. K Figures based on prospectus or other official estimates for 1984. M Dividend and yield based on prospectus or other official estimates for 1983. N Dividend and yield based on prospectus or other official estimates for 1982-83. P Figures based on prospectus or other official estimates for 1983. Q Gross. T Figures assumed. Z Dividend total to date.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xc ex capital distribution

REGIONAL AND IRISH STOCKS

The following is a selection of regional and Irish stocks, the latter being quoted in Irish currency

Stock	Price	+ or -	Stock	Price	+ or -
Albany Inv 20p	76		Fin 13% 97/02	£91½	+¼
Craig & Rose £1	900		Alliance Gas	72	
Finlay Pkg. 5p	47		Arnott	217	
Higsons Brew	102	+2	CPI Hldgs.	82	2
Holt (Jos) 25p	890		Carroll Inds.	120	+3
I.O.M. Stm £1	127		Hall (R. & H.)	50	
			Heiton Hldgs.	21	
			Irish Ropes	53	
IRISH			Jacob (W. & R.)	65	
Exch. 12% 1985	£99		T.M.G.	60	
Nat 9¾% 84/89	£87¼	+½	Unidare	75	

For Bridgwater see Property

OPTIONS

3-month Call Rates

Industrials					
Allied Lyons	15	House of Fraser	21	Vickers	12
BOC Grp.	20	I.C.I.	45	Wentworth Nld	35
B.S.R.	18	"Imps"	12		
Babcock	10	I.C.L.	6	**Property**	
Barclays Bank	45	Ladbroke	22	Brit Land	9
Beecham	20	Legal & Gen.	45	Cap Counties	15
Blue Circle	40	Lex Service	35	Land Sec	34
Boots	17	Lloyds Bank	50	MEPC	24
Bowaters	22	"Lots"	3	Peachey	17
Brit Aerospace	19	London Brick	18	Samuel Props	12
B.A.T.	14	Lucas Inds.	16	Sterling Gum	4
Brown (J.)	3	"Mams"	12		
Burton Ord	38	Mrks. & Spncr	20	**Oils**	
Cadburys	11	Midland Bank	42	Brit Oil & Min.	6
Courtaulds	11	N.E.I.	10	Brit Petroleum	35
Debenhams	14	Nat West Bank	55	Burmah Oil	16
Distillers	28	P & O Dfd	22	Charterhall	8
Dunlop	5	Plessey	20	Premier	5
Eagle Star	60	Racal Elect	18	Shell	50
F.N.F.C.	6½	R.H.M.	7	Tricentrol	20
Gen Accident	42	Rank Org. Ord	19	Ultramar	60
Gen Electric	17	Reed Intl	34		
Glaxo	25	Sears	8	**Mines**	
Grand Met	30	T.I.	14	Charter Cons	22
G.U.S. 'A'	55	Tesco	16	Cons Gold	50
Guardian	45	Thorn EMI	55	Lonrho	8
G.K.N.	16	Trusthouse	16	Rio T. Zinc	58
Hawker Sidd	32	Turner & Newall	8		
		Unilever	75		

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This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £700 per annum for each security

CURRENCIES; MONEY and CAPITAL MARKETS

FOREIGN EXCHANGES

Dollar's fall continues

BY COLIN MILLHAM

The dollar showed no sign of sustained recovery last week, although there were days when some attempt was made to rally the currency. Any halt to the downward slide was only the result of a temporary technical adjustment as dealers covered short positions.

Economic news was rather thin on the ground, but the figures published did nothing to boost the dollar. Leading indicators for the U.S. in January rose by 1.1 per cent, much in line with expectations, but continuing to fuel fears that fast rising economic growth will cause inflationary pressures later this year.

Weekly M1 money supply rose by $1.7bn, rather less than feared, but taking it above the top of the Federal Reserve's target range, although the effect of this was more obvious on the U.S. bond market than the foreign exchanges.

As sentiment has moved against the dollar different statistics have tended to dominate the market's attention. Rising money supply until recently would have pushed the dollar higher because of the implications of high interest rates, but last week there was much more concern about the trade figures. The market was expecting a January deficit of about $7bn to $8bn, but was disappointed by the rise to a record $9.47bn from $6.74bn in December.

Mr Paul Volcker, chairman of the Federal Reserve Board, reinforced his earlier comments about the U.S. becoming a major world debtor last week, and this also undermined confidence in the dollar. The D-mark was the main beneficiary, rising to its highest level against the dollar for over four months, but on Friday the Japanese yen was showing signs of recovery, after remaining closely tied to the weakening dollar for some time, and rose to its highest level for over a year.

Sterling was slightly firmer against the dollar, but moved down with the U.S. currency against Continentals. Oil supplies and the war between Iran and Iraq overhung the pound all week, keeping it rather nervous, while the January UK trade figures were regarded as disappointing, with the market expecting a small surplus and not the published deficit of £339m.

£ in New York

	March 0	Prev. close
Spot	$1.4850-4840	$1.4860-4870
1 month	0.10-0.19 dis	0.10-0.11 dis
3 months	0.42-0.44 dis	0.42-0.44 dis
12 months	0.32-0.37 dis	2.17-2.22 dis

£ forward rates are quoted in U.S. cents discount.

FORWARD RATES AGAINST STERLING

	Spot	1 month	3 month	6 month	12 month
Dollar	1.4810	1.4820	1.4854	1.4913	1.5045
D-Mark	3.83	3.8188	3.80	3.7657	3.7228
French Franc	11.79	11.85	12.0150	12.2194	12.6108
Swiss Franc	3.1925	3.1763	3.15	3.1113	3.0421
Japanese Yen	338.0	337.3	335.8	333.8	330.0

EMS EUROPEAN CURRENCY UNIT RATES

	ECU central rates	Currency amounts against ECU March 0	% change from central rate	% change adjusted for divergence	Divergence limit %
Belgian Franc	44.9008	45.8032	+2.01	+1.93	±1.5447
Danish Krone	8.14104	8.20178	+0.75	+0.67	±1.6425
German D-Mark	2.24184	2.23818	−0.25	−0.32	±1.0642
French Franc	6.87456	6.89287	+0.27	+0.19	±1.4052
Dutch Guilder	2.52595	2.52436	−0.06	−0.14	±1.4964
Irish Punt	0.72569	0.728140	+0.34	+0.26	±1.6699
Italian Lira	1403.49	1393.72	−0.70	−0.78	±4.1505

Changes are for ECU, therefore positive change denotes a weak currency. Adjustment calculated by Financial Times.

BANK OF ENGLAND TREASURY BILL TENDER

	March 2	Feb. 24		March 2	Feb. 24
Bills on offer	£100m	£100m	Top Accepted rate of discount	8.6036%	8.8643%
Total of applications	£609m	£481.475m	Average rate of discount	8.5909%	8.8475%
Total allocated	£100m	£100m	Average yield	8.78%	[illegible]
Minimum accepted bid	£97,853	£97.79	Amount on offer at next tender	£100m	£100m
Allotment at minimum level	74%	44%			

THE POUND SPOT AND FORWARD

[illegible]

THE DOLLAR SPOT AND FORWARD

[illegible]

OTHER CURRENCIES

[illegible]

CURRENCY MOVEMENTS

[illegible]

CURRENCY RATES

[illegible]

EXCHANGE CROSS RATES

[illegible]

EURO-CURRENCY INTEREST RATES (Market closing rates)

[illegible]

Asian $ (closing rates in Singapore). Short-term 9 11/16-9 13/16 per cent; seven days 9 11/16-9 13/16 per cent; one month 9 7/8-10 per cent; three months 10 1/8-10 1/4 per cent; six months 10 3/8-10 1/2 per cent; one month 10 11/16-10 13/16 per cent. Long-term Eurodollars two years 11 1/4-11 3/8 per cent; three years 11 7/8-12 1/2 per cent; four years 12 1/4-12 1/2 per cent; five years 12 1/4-12 3/8 per cent nominal closing rates. Short-term rates are call for U.S. dollars and Japanese yen; two days' notice

FINANCIAL FUTURES

LONDON

[illegible]

CHICAGO

[illegible]

WEEKLY CHANGE IN WORLD INTEREST RATES

[illegible]

AMSTERDAM			DUBLIN		
One month	5 7/16	+1/4	One month	12 1/4	−1/4
Three month	6 1/8	+1/8	Three month	10 5/8	Unch'd

London—band 1 bills mature in up to 14 days, band 2 bills 15 to 33 days, and band 3 bills 34 to 63 days. Rates quoted represent Bank of England buying or selling rates with the money market. In other centres rates are generally deposit rates in the domestic money market and their respective changes during the week. Band 4 bills 8 7/8.

MONEY MARKETS

Conditions tighten but rates fall

Credit conditions tightened sharply in the London money market towards the end of last week, after a fairly comfortable start. A major factor behind the sudden change was the payment of £1bn in Petroleum Revenue Tax, due on Thursday. After other factors were taken into account this left a shortage on the day of about £800m, which the Bank of England mainly absorbed by £651m of bill repurchase agreements.

The authorities now hold so many bills that the unwinding of earlier agreements and the refinancing of bills maturing in official bands are nearly always the major reasons for daily shortages, and clearly another £1bn in tax money was going to strain the system too far.

It was with this in view that the Bank of England announced a gilt repurchase agreement the previous week, and on Friday the banks took up £668m of the £900m available, roughly offsetting the adverse factors and leaving the day-to-day credit position almost flat.

Conditions roughly in balance were also initially forecast on Monday and Tuesday, but these were also later revised to small shortages. Exchequer transactions adding funds to market liquidity, partly through payment of gilt dividends, were largely responsible for keeping conditions relatively easy until the change in Exchequer flows on Thursday.

Although sterling lost ground to Continental currencies, and was seen as vulnerable to the world oil supply situation as affected by fortunes of the countries involved in the Gulf War, London dealers were more impressed by the pound's performance against the weak dollar, and this tended to set the tone for interest rate movements.

Rates declined slowly for most of the week, and this process tended to accelerate on Friday despite sterling's worsening position against Continentals. The yield curve in the interbank market went virtually flat at 9-9 1/8 per cent for periods from one month to six months, a fall of between 1/8 per cent and 3/8 per cent on the week. Caution may yet prevail, but there is growing speculation around the City about a possible cut in clearing bank base rates to coincide with the Budget later this month, and the Treasury bill rate fell to its lowest level for nearly six years at Friday's tender.

UK clearing banks' base lending rate 9 per cent (since October 4 and 5)

MONEY RATES

Mar. 2	Frankfurt	Paris	Zurich	Amst'dam	Tokyo	Milan	Brussels	Dublin
Overnight	5.5—6.35	10 1/4	1 1/4-8 3/4	3 3/8	6.35593	16 7/8-17 1/4	11.8	11 3/4-12
One month	5.65-5.80	12 3/8-10 1/8	3 1/16-3 1/16	6-6 1/8	6.53125	13 7/8-17 1/4	12-10 1/4	10 1/8-12 3/8
Two months	5.75 5.90	10 7/16-12 7/16	—	—	—	—	—	18 3/8-12 5/8
Three months	5.80-5.95	19 1/2-10 5/8	3 5/8-3 3/4	5 1/16-5 1/16	6.28125	17-17 3/8	19-19 1/4	19 1/2-12 3/4
Six months	5.90-5.05	19 1/16-12 1/16	—	5 1/8-6 1/4	—	—	12-19 1/4	12 3/4-13
Lombard	5.5	—	—	—	—	—	—	—
Intervention	—	19	—	5 7/8	—	—	—	—

LONDON MONEY RATES

[illegible]

FT LONDON INTERBANK FIXING

[illegible]

MONEY RATES — NEW YORK

[illegible]

SECTION III

FINANCIAL TIMES SURVEY

International Construction

Contractors throughout Europe are reporting a shortage of orders, as financing problems affect both developed and developing countries. Competition is becoming fiercer, too, with newcomers from Japan, Korea, Turkey and elsewhere entering the fray

Bumping along the bottom

By JOAN GRAY, Construction Correspondent

RECOVERY? What recovery? is the unanimous answer from heads of British construction companies questioned about how they see their international market prospects.

Take Mr John Armitt, assistant managing director of John Laing International, for example. "No-one in tha construction industry in this country would say there is any sign of improvement," he says. "In real terms our international workload for 1984 is on the increase because we've got a couple of large contracts outstanding in the Middle East, but looking at 1985 and 1986 I can only say it's a different picture. I wouldn't pretend for a moment the prospect is rosy."

Mr Don Holland, chairman of Balfour Beatty, echoes his gloom. "The number of identifiable major projects —such as dams, harbours and ports—is now very much smaller. Markets are just disappearing because of shortage of finance in the developed world, let alone the developing world. I certainly don't see any boom times."

Mr Fred Tarrant, managing director of Costain International is also doubtful whether there will be any early improvement. "People say 1985 is going to be better, but I query on what basis—unless they just think things have got to get better because they can't get any worse," he said.

The gloomy view from Britain is echoed by contractors from the rest of Europe.

Philipp Holzmann, the German giant which has this year slipped from its ranking as one of the top five international contractors, has found that its new international business in 1983 was about half the DM 3.2bn it achieved in 1982.

"We see a decrease in new contracts, like all the German construction companies," said Holzmann executive Herr Pfeiffer. "1983 was the worst year for German construction companies since 1973 when the oil price problems started. International contracts awarded to German companies (other than contracts in the U.S.) were worth only about DM 4bn in 1983, compared to about DM 8bn in 1982 and about DM 12bn in 1981."

Workload down

The Italian contractors are faring similarly badly. The year 1982 showed a 60 per cent decrease in new contracts won by Italian contractors overseas, and the situation was no better in 1983, said Sra Lia Zuccia, chief foreign officer of the organisation which represents Italian construction companies, ANCE. According to ANCE's figures, the Italian contractors were faring far worse than competitors such as the French, who experienced a 20-25 per cent decline in overseas workload.

On top of the gloomy reports from Britain, France, Germany and Italy, the workload of the Danish, Dutch and Belgian construction industries is also down.

The reasons why the older European construction industries are doing so badly can be put quite simply: there are fewer projects available, and more companies fighting for them.

The established international contractors are having to adjust to a world where their traditional markets are shrinking and they are faced with more and more new competitors.

"There is a desperately competitive situation in world markets because of over-capacity in tha construction industry," said Mr Robin Foster, secretary of the UK international contractors' trade association, the Construction Industry Export Group.

"World capacity has built up since the war, encouraged through the affluent times of oil plenty, and over the last three years there has been a great dive in the number of projects available."

Japan, Taiwan, Korea, Turkey, Poland, Yugoslavia, China, Pakistan and Greece have all built up efficient, aggressive and financially innovative construction companies competing for the shrunken international market.

This shifting pattern of competition is echoed in the ranking of the top international contractors (see Tabla).

The Korean Hyundai, for example, is now ranked at number 10, having moved up from 13th place the year before. Japan's JGC is now at 13 from 50 the year before, and the Japanese Chiyoda is at 25 from number 48. Turkey's Enka Insaat has arrived at number 24 from 45, and there is a new Greek entrant at number 27, Consolidated Contractors International, of Athens.

All these companies have increased their proportion of international work over the past year. Chiyoda, for example, has, in a declining international market, managed to increase its international workload from 49 per cent of its total to 80 per cent, from $711m to $1.1bn.

Under threat

Established European contractors feel threatened by this new competition—but, as Mr Bill Francis, a director of the UK's Trafalgar House, points out, there is a solution. "Don't compete head-on with tha Japanese companies but find a specialist market. People who are efficient and competitive can develop their own markets and expand overseas."

Another approach is, if you can't beat them, join them. "We compete with the Japanese and have joint ventures with them," says Balfour Beatty's Mr Holland, who instances co-operation on power line construction with Sumitomo. "We don't mind getting under the Japanese umbrella because they are good payers and if you are a subcontractor you can help them with the language and handling local customs."

UK consultants Rendell Palmer and Tritton are now following opportunities arising from a recent Government initiative, where a group of British companies was sponsored to visit Japanese contractors and trading houses to see if there were any possibilities for co-operation between them.

At the same time, however, contractors are having to look round the world, ruefully crossing off places where they can no longer work because the countries are regarded as too politically or financially unstable to be good credit risks.

Mr Holland of Balfour Beatty lists a number of places which have now "gone off cover because they are not financially stable enough to service their debts, so the government's Export Credit Guarantee Department won't cover their loans." The list include nearly the whole of Latin America, much of Africa, Iraq, and a variety of other countries.

One of the most promising new markets for construction companies is South East Asia, with its growth rate of 5-6 per cent and heavy investment. The Asian Development Bank put nearly US$900m into just four countries—Indonesia, the Philippines, Thailand and Malaysia—in 1982, 70 per cent of which was spent on big construction projects.

But with so many markets contracting, those that do look promising begin to exhibit a "honeypot effect" as they become the focus of attention for companies throughout the world. And, since getting construction contracts requires long term planning—major projects are not picked np hy jetting in with a suitcase—newly-arrived companies are likely to find themselves at the end of a long queue.

The time-lag in getting contracts is another reason for contractors' concern about future workload, explained the UK Export Group's Mr Foster. "Because of the tima taken to win contracts, today's figures reflect orders won years ago, so over the next few years tha full effects of the recession will make themselves felt in even further reductions in workload."

Many European contractors are unhappy, too, at what they see as a lack of government support.

Mr Tom Candlish of Wimpey, President of the UK Construction Industry Export Group, said the industry was now lobbying the Government to ensure that the level of aid compares with that advanced to European competitors. It is also arguing that overseas aid should be geared to getting money back for British industry."

The Italian contractors too are lobbying their government for more support, and are particularly concerned at what they feel is the much more modest government assistance they get than their French competitors.

For the established European contractors it may be that whole areas of classical civil engineering work—such as road building —no longer are going to be available to them because their costs are too expensive compared to their new competitors.

They will have to look increasingly to the special skills they have to offer, and to become more involved in putting together financial packages to back work they want to do.

As Mr Armitt of Laing put it: "I am quite sure there is no panacea and no pot of gold just sitting there for some bright contractor to discover. So, we have to work harder and more diligently at existing markets and look at ways other than traditional ways of obtaining work."

TOP 30 COMPANIES 1982

	CONTRACTS ($m)		CONSTRUCTION SPECIALITY								
COMPANY AND COUNTRY	Foreign	Total	Bldg.	Highwy./Bridge	Sewer	Process	Pwr.	Marine	Airport	Design	Con. structn. mngmt.
1 The CT Main Corpn., U.S.	5,201	5,704	x	x	x	x	x	x	–	y	y
2 Kellogg Rust, U.S.	5,000	8,200	x	x	x	x	x	x	x	y	y
3 Fluor Corpn., U.S.	4,097	6,507	x	–	–	x	–	–	x	y	y
4 Bechtel Group, U.S.	3,866	5,490	x	x	x	x	x	x	x	y	y
5 Davy Corpn., England	3,380	3,429	–	–	x	x	x	x	–	y	y
6 C. F. Braun and Co., U.S.	3,300	3,315	–	–	–	x	–	–	–	y	n
7 SADE-SADELMI Group, Italy	3,242	3,246	–	x	x	x	x	x	x	y	n
8 Philipp Holzmann AG, West Germany*	3,223	4,864	x	x	x	x	x	x	x	y	y
9 The Parsons Corpn., U.S.	3,074	4,319	x	x	x	x	x	x	x	y	y
10 Hyundai Engrg. and Const. Company, Korea	2,920	3,422	x	x	x	x	x	x	x	y	n
11 Raymond International, U.S.	2,687	4,217	x	x	x	x	x	x	x	y	y
12 Foster Wheeler Corpn., U.S.	2,500	3,200	–	–	–	x	–	–	–	y	n
13 JGC Corpn., Japan	2,480	3,069	–	–	x	x	–	–	x	y	–
14 Lummus Group, U.S.	2,392	3,252	–	–	–	x	–	–	–	y	n
15 Guy F. Atkinson Company, U.S.	1,993	2,654	x	x	x	x	x	x	x	n	y
16 DUMEZ, France	1,675	1,898	x	x	x	x	x	x	x	y	n
17 IMPRESIT SpA, Italy	1,631	1,914	x	x	x	x	x	x	x	y	n
18 Societe Auxiliare d'Entreprises, France	1,505	2,808	x	x	x	x	x	x	x	y	y
19 McDermott, U.S.	1,454	2,367	x	–	–	x	x	x	–	y	n
20 Daelim Industrial Company, Korea	1,420	1,549	x	x	x	x	x	x	x	y	n
21 Morrison-Knudsen Company, U.S.	1,325	3,104	x	x	x	x	x	x	x	y	y
22 Brown and Root, U.S.	1,250	2,472	x	x	x	x	x	x	x	y	y
23 Costain Group, England	1,205	1,451	x	x	x	x	x	x	x	y	y
24 Enka Insaat ve Sanayi AS, Turkey	1,129	1,405	x	x	x	x	x	x	x	y	y
25 Chiyoda Chemical Engrg. and Constructn. Company, Japan	1,118	1,391	x	x	x	x	x	x	x	y	y
26 SPIE-Batignolles, France	1,070	2,074	x	x	x	x	x	x	x	y	y
27 Consolidated Contractors Int. Company, Greece	1,061	1,061	x	x	x	x	x	x	x	y	y
28 SGE/Sainrapt et Brice, France	1,055	2,065	x	x	x	x	x	x	x	y	y
29 Hanyang Corpn., Korea	1,018	1,201	x	x	x	x	x	x	x	y	–
30 Lurgi GmbH, West Germany	1,006	1,128	–	–	x	x	–	–	–	n	n

* Including J. A. Jones Const. Company.

y—Yes. n—No.

Source: Engineering News Record/International Construction Week.

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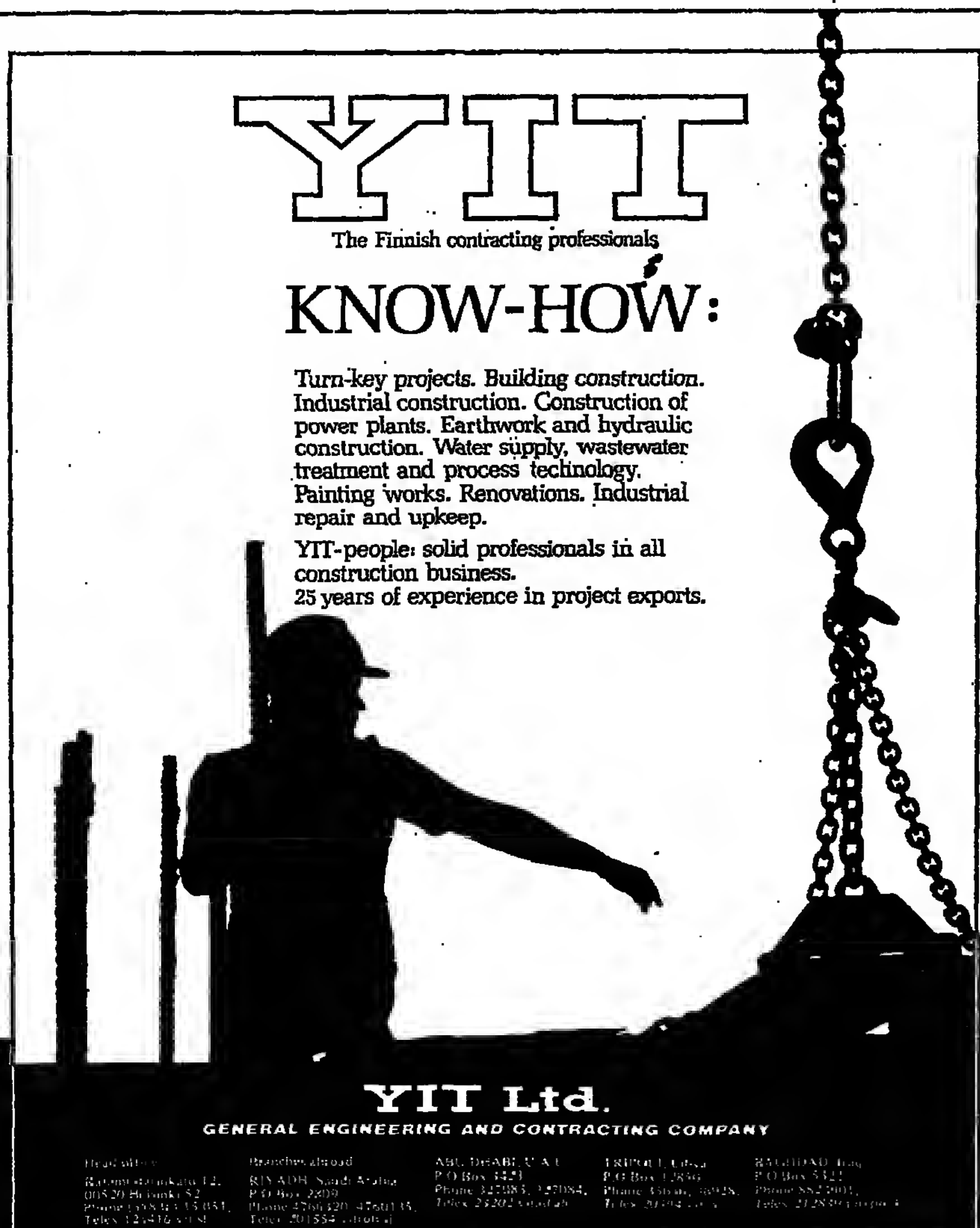


The competition intensifies

BRITAIN'S construction consultants working overseas had their best year ever in 1982-1983. The combined earnings of engineers, architects and quantity surveyors totalled almost £610m, a contribution to the economy which, says Mr Alan Parish, chief executive of W. S. Atkins, exceeds *that* made by UK banks. However, neither he nor his colleagues among the other top international consultants, are very optimistic about the future *as far as overseas work* is concerned.

The changes afoot are all related to each other. The world's oil-based economies, which kept British consultants busy for the past decade, are beginning to feel the pinch. As a result, there is more insistence on value for money in construction projects and less whim and extravagance.

Competition is getting tougher all the time—and winning the work is far from the end of the difficulties.

Taking advantage of the "clients' market" situation, some countries are making it increasingly difficult for consultants to obtain their fees in hard currencies, and to remove their earnings from the country of origin.

"You don't go abroad for your holidays," says Mr Owen Luder, who has many years' experience. "Be light on your feet. Don't get overexposed, try and get fees 'up front.' Be prepared for a hard slog.

"On the other hand, you may be pleasantly surprised by the better relationship which develops among the professional team and the contractors when working overseas. Finally, never expect to get paid the last 10 per cent of your fee—you probably won't."

One remedy is working in Third World countries on projects financed by the World Bank and other international agencies. They are usually good clients and the schemes they support are important and satisfying. But in terms of overall sums, this source is little more than a drop in the ocean.

Insuring with the Government's Export Credits *Guarantee Department is one* way of buying peace of mind. Since its introduction in 1972, the ECGD's standard investment insurance has provided cover again losses arising from war, expropriation and restrictions on the transfer of remittance for a flat rate premium of £1 per cent per annum, plus a commitment premium of £0.25 per cent per annum on a reserve amount for future retained earnings.

At the end of September 1983 the ECGD was covering 179 different schemes in over 40 markets, worth some £102m. A month later, the cover scheme was improved to vary the premium rates depending on an assessment of the host country, include cover against loss arising through the political repudiation of a commitment given by the host government, increase cover on the revaluation of fixed assets and increase cover for a higher level of earnings retained in the overseas enterprise.

W. S. Atkins have experienced six months delay in getting claims met, and are also unhappy that the ECGD takes into account fees paid by the host country in its local currency, however worthless such payments may be to the consultant. However, the firm insists on covering all its overseas projects with the ECGD—unless they are financed through the World Bank.

Atkins' overseas workload has already declined from 55 per cent of their total to some 40 per cent, and similar reductions are experienced by *other major consultants.* In addition, they find less and less work coming through direct commissions, as used to be the norm.

Consultants in the UK

MIRA BAR-HILLEL

Instead, the client's attitude has changed towards treating the consultant more like a contractor, and demanding competitive bids. Even with shortlists this is an expensive process, and care must be taken to recycle the work invested in abortive bids.

Another danger of the increasingly competitive atmosphere, says Mr. Parish, is that better consultants can be driven out by underbidding. However, it is still widely acknowledged that UK consultants have the edge in terms of impartiality of advice, including the choice of contractors. Although British contractors may complain, their professional colleagues insist that they cannot afford to favour their compatriots.

The current exchange rate is also helping our consultants, especially in competition with U.S. engineers. There is general agreement that the pound should not rise higher than £1=$1.6.

The Middle East continues to feature prominently for work in hand. Maunsell Consultants and Cairns and Byles, with additional help from Department of Transport specialists, are revolutionising road traffic in Kuwait.

In addition to an extra 200km of motorway and expressway, they are advising on road signs, police patrols, emergency phones, closed-circuit television and automatic incident detection.

Scott Wilson Kirkpatrick and Partners have been instrumental in creating a comprehensive tourist map of Baghdad and are involved in a street numbering project for the municipality. The UK Overseas Development Administration, which finances projects in the Third World, appointed engineers Cremer and Warner to help Egypt produce its own triple superphosphate from an indigenous raw material to provide low-cost fertiliser and reduce the country's imports bill.

In Zimbabwe, the economic consultancy arm of Ove Arup are trying to find the most economically and technically suitable capital development programme for the country's "natural resource"—grass-fed beef. In Hong Kong, on the other hand, solid waste disposal is a major problem of the overcrowded community and Binnie and Partners are working on a computer-based system.

All these are examples of the degree of diversification of Britain's consulting engineers into fields where their expertise may come in very handy when supplies of major international airports, bridges, dams, mass transit systems and power stations begins to dwindle.

British architects are extending their overseas activities, and more and more are being rewarded with the Queen's Award for export achievement. Among this year's winners are Architects Co-Partnership who have built hospitals in Saudi Arabia, Iraq and Trinidad, four technical schools in Oman and exhibition complexes in Sudan and Jordan.

YRM also won the Queen's Award for work on university buildings in Bahrain and Oman (including the centre-vertial Sultan Qaboos university, where Cementation are the main contractor) and banks in Hong Kong.

James Cubitt and Partners have been involved in university projects in Nigeria and Libya. With Ove Arup they are designing a high-security printing and minting complex for the Central Bank of Iraq.

Winners of international competitions included Gollins Melvin Ward (GMW) for a Dubai food market; and Anthony Goss Associates for the University of Technology at Bauchi, Nigeria.

Lending climate uncertain

Project finance

TERRY POVEY

"WHAT WE now face is a buyers' market and probably the major factor in awarding contracts is the financing package with which the different companies or consortia bidding for a project can come up."

This was the view of a UK-based merchant banker. Merchant banks are increasingly becoming involved in construction projects as the complexity of the financing packages grow. "A detailed financial analysis of the package is a critical part of choosing among a number of perhaps otherwise equally qualified candidates."

It seems that today the process is to first draw up a short list of those thought likely to be able to do the work according to the customers' wishes—a list of usually half a dozen groupings—and then go with a fine tooth comb through their plans to finance the work.

Previously, project finance tended to be based almost totally on a project's intrinsic worth, the land and so on, plus its future earnings capacity. This is now very rare as cost over-runs have become the norm and two years into a tightly financed scheme it is not possible to go back and raise more cash on the basis of the same land and earnings forecasts. As the need for additional funds is now assumed to be automatic, so the financing schemes have had to change.

This has produced the hybrid package—a mix of funding drawn partly on a value plus earnings basis (and this preferably tied to firm commitments from end-users), plus other kinds of finance.

End-users have become very wary of making hard and fast commitments. Variations in product prices have been so wide over the last five years that the bankable contract locking-in a set of customers to fixed quantities of end product at more or less fixed prices is no longer on.

The old form of "pure project financing" is therefore under great pressure from two directions—from both lenders and end-users. What the lenders wish to see are fairly solid shareholders who can provide additional funds should they, as is almost always the case, be necessary. In addition, some kind of guarantees to put in funds, even if only half the sum involved appears "on the books."

In the case of contracts where the government is the customer—for example, in Thailand and Indonesia, and also in many of the Middle East states—some kind of government involvement is crucial; ideally, as far as any debts are concerned, or an agreement to pick up the product come what may in the market place.

With the lending climate of the last few years being fairly uncertain—and, as one observer says, "one has to remember that lenders are essentially simple animals at heart and the going sentiment is to lend only to good risks and not at all to uncertain one"—being able to provide solid backing, both governmental and from other shareholders is highly rated.

One organisation which is playing a very important role in project work is the IFC. The World Bank is not itself directly involved in projects.

Widely held to have the most effective body of knowledge and expertise in the world, the IFC's blessing performs much the same function for a project in the eyes of lenders as does the IMF for sovereign borrowers.

The IFC claims that is has never been defaulted on and operates a cross-default system. If one chooses to repay the IFC but not other creditors, then you are considered as being in default to the IFC. This is the nearest the IFC comes to underwriting a project on behalf of all its creditors.

Normally, the IFC acts on behalf of the project—that is the customer—and, for example, in the Blue Circle cement deal in Indonesia they clearly see themselves as working to make sure the project is a success. They also try to make sure that all the investors get a fair return although "they would not necessarily put a lending bank high up on their list of priorities."

Other international agencies also involve themselves in project finance—for example, European Investment Bank, Asia Development Bank and the African Development Bank—but their role is circumscribed by a need to protect their own ratings as borrowers. The collapse of the Latin American organisation equivalent to these and the problems of Singapore's Private Investment Corporation (Picca) serve also as a warning to the less well funded of these groupings.

As far as the various export credit agencies are concerned, the problem is often that they have no special knowledge that enables them to make assessments of projects—unlike the IFC. For example, the UK's ECGD has "no one who can evaluate projects," commented one banker.

The best way to get project related funds out of the ECGD has been found to be to first get the backing of the Commonwealth Development Corporation or the IFC and then get ECGD involved purely on an export financing basis. Such funding can be important as seed-money, say contractors.

On the technical side of the financing arrangements, a major development has been in both leasing and in leveraged leasing. Under a leasing scheme—which has the advantage of being off balance sheets—the user rents his requirements.

The leveraged schemes are those leasing arrangements done with an eye to tax advantages. Often financing is put through a third country where the tax benefits are greatest.

Of the last 15 projects involving investments of more than £50m, all have been done on a leveraged basis. Leasing is also used to gain access to yen funds—in Japan the leasing companies are *outside the strict control* of the Ministry of Finance—so foreign companies would rather lease from this sector in Japan than attempt to borrow *from* a Japanese bank.

With order books in the Middle East now looking decidely thinner and the war between Iran and Iraq forcing Iraq to postpone plans and to seek extended credit terms, lenders are now all the more keen on the degree of inventiveness shown by the contractor.

"Today, the contractor must be prepared to shoulder a part of the customers risk—a risk that traditionally was borne by the banks—otherwise the buyer will simply shop elsewhere."

Specialised approach to markets

"DIVERSIFY and specialise" could be emblazoned as the international contractors' new motto for survival.

Take Tarmac, for example, which has had to change its markets and philosophy radically in the face of declining workloads in the UK and overseas.

Mr Bernard Woodman, chief executive of Tarmac International, explained: "We used to concentrate on the oil-rich countries just like every other contractor in the world. That meant there were huge tender lists with 50 or 60 companies bidding for every project — which put our chance of getting the work down to 50 or 60 to one and meant we could only get the job on price.

"So our philosophy now is to forget the oil-rich countries and to look at the under-developed and developing countries where we can ensure funding before we get the work and provide them with a total design, construct and finance package."

There are two key elements in Tarmac's new approach, Mr Woodman explained. The first is to aim for developing countries such as Algeria, Gabon, Thailand, Malaysia and Indonesia where, because they are regarded as politically sound and as having potential mineral wealth, the British Government's Export Credit Guarantee Department and the banks will provide long-term loans.

The second is for the company itself to identify and suggest major projects which need to be done and to arrange the long-term finance for them.

Mr Woodman emphasised that it is a slow process. "You don't go in this week and get a job the next," he said. "You have to visit, make connections and find out what the country needs and can't get money for. Then when you've identified it, you've got to put in a proposal and get the money for it, and that might take two years. But now we think 1984 is the year we should benefit from our two years of groundwork."

The issues are somewhat different for Balfour Beatty. "New markets? There's not many new countries left for us because we've been working in nearly every country in the world already," said Mr Don Holland, the chairman.

Balfour Beatty was one of the first British companies to spot the potential of Indonesia as a new market. It has been there for nine years and is working on a £240m contract to build a hydro electric dam, which has required cliff-hanging renegotiation as the government has run into cash problems.

The company also spotted the Philippines as a potential new market, and is now working there on contracts for power stations worth £40m.

"But getting into the Philippines was tough for a British company because the market was dominated by the Americans and Japanese," said Mr Holland. "We had tendered with no success and were told the only way in was to station people there." They eventually got the £40m work after investing £250,000 over more than two years.

Another new market Balfour Beatty is aiming for is the U.S. —and here the company is hoping to build on its expertise in railway electrification.

The company has already been working on electrifying the north-east corridor railway line from Boston to Washington, and now hopes to benefit from the "great interest in electrifying railways in the U.S., he said.

Contractors

JOAN GRAY

John Laing International, whose activities have so far centred on the Middle East, is also involved in a search for new markets. "We're looking everywhere and trying to narrow it down to places where there is growth and opportunity," said Mr John Armitt, assistant managing director.

"We've not yet decided where we're going to make a concentrated effort and for now are just trying harder in our conventional Middle East market. We're also looking at ways other than our traditional ones of obtaining work, such as taking on more management contracts overseas, increasing joint ventures and use of financial packages."

John Laing does not believe in trying to create projects by identifying infrastructure needs and suggesting how they could be met, said Mr Armitt. Costain is also wary of this approach to finding new work.

Mr Fred Tarrant, managing director of Costain International, explained why.

"It's a good idea in concept," he said. "But it's not so easy to pull off as you might think, because in construction you're selling expertise and not a product. Coca Cola sells something which no one else can make without a licence, but in the construction business you haven't got that, and if you suggest something you're not the only person who can do it."

One way Costain is living with the recession is "by learning to cut our cloth to fit the situation we're in," said Mr Tarrant. The company is looking at its overheads carefully and has, for example, moved its headquarters from London to Woking and cut its administrative staff by 5 per cent.

It is also looking carefully at the cost-effectiveness of its area offices in Bahrain, Abu Dhabi, Dubai and Oman.

"We are also trying to be more competitive, to improve our methods of bidding, to obtain good prices from suppliers, to widen the scope of where we go, to see if we can do jobs more efficiently and cut the cost by reducing the number of men, and to use new methods of planning and progressing," said Mr Tarrant.

Costain too is trying to make increased use of the expertise it has built up overseas in project management. "Rather than fixing reinforcements and pouring concrete we could, for example, put management into a local company in a country where our management skills can complement their local knowledge," said Mr Tarrant.

The company has already done this on contracts to build a dam in Sri Lanka and a bank in Egypt.

Trafalgar House has kept a low profile as a construction group until now, when the recession has made it change its approach.

"We encouraged our businesses to develop their own high profiles, be they Cunard, the Ritz or top table construction companies such as Cementation, Redpath Dorman Long, Trollope and Colls or Cleveland Bridge," explained Mr Bill Francis, Trafalgar House director.

"But now we've put all the civil engineering companies together to market as Trafalgar House Construction as part of our approach of selling complete design, finance and construct packages drawing on all the skills of the group."

Trafalgar House Construction's approach is to specialise in high-quality building work, said Mr Francis. "We don't go overseas to do low-cost housing or straightforward roadworks because that's where the Third World countries start to do their own construction and we don't want to compete there but in more complex jobs.

"Few people in the world could, for example, do what we are doing in the Hong Kong and Shanghai Bank headquarters building in Hong Kong, where we have got a £110m contract for supplying steel to tolerances we are used to in the North Sea."

Mr Francis also emphasises the importance of providing a complete specialised service in getting work overseas. "If you put up a hotel, such as the Hilton which we did in Bahrain you even supply the napkins if that's what the client wants," he said.

Wimpey has also decided to move to the U.S.—and to take advantage of its skills as a leading housebuilder.

Wimpey has bought housebuilding companies in Texas and in California. It plans to be building 2,000 houses a year in the U.S. by 1985, and hopes that this will help compensate for the downturn Mr Tom Candlish, the managing director, sees coming in the UK housing market.

Another way Wimpey is diversifying in response to the recession is by turning to multi-disciplinary industrial projects which draw on the group's electrical and mechanical engineering as well as civil engineering skills.

"We are offering a turnkey industrial operation and we put forward financial packages to make it attractive to the client," said Mr McDowall.

The major example he cites is the $1.4bn aluminium smelter the company built in Dubai, after an earlier smelter it built in Bahrain.

Wimpey spotted aluminium smelters as a growth market, Mr Candlish explained, "not because there is a resurgence in smelters but because they need to be moved to the cheapest sources of power."

Public spending cuts bring need to diversify

THE COLLAPSE late last year of IBH Holdings, the large West German construction equipment group, will provide some relief from the excessive competition prevailing in most sectors of this deeply depressed industry. But most construction equipment manufacturers expect a further lengthy period of poor trading conditions and restructuring of manufacturing capacity.

The industry depends to a very large extent on public sector capital spending. Most governments are still trying to rein in spending, and capital projects are usually the first and enduring victims of their economy drives.

Demand for the main types of construction equipment has dropped by 30 to 50 per cent since 1979. For example, the number of crawler tractors sold in the U.S., fell from nearly 20,000 units in 1979 to 8,000 in 1982. In the UK, backhoe loader sales tumbled from about 6,000 a year to 2,500 over the same period.

Not surprisingly, the main construction equipment manufacturers have suffered sharp declines in output and financial performance. Caterpillar Tractor of the U.S., the industry leader, went into loss in 1982 for the first time in 50 years, and had another loss last year. J. I. Case of the U.S. and Fiat-Allis of Italy, the third and fourth largest competitors, have also been suffering big losses.

Only Komatsu of Japan, the fast growing number two in the industry, has maintained a reasonable record through the recession, but its performance too began to flag last year. Net profits in the first half were down 14 per cent to Y14.75bn ($60.2m).

Still, it and J. C. Bamford Excavators of Britain are probably the only two major producers in the world that still make profits on construction equipment manufacturing. JCB, which is privately owned, had pre-tax profits in 1982 of £10.8m on sales of £110m.

Given the drastic trading conditions, it was surprising that the industry went so long without a major shakeout. It has now become clear that IBH only survived as long as it did because of some irregular banking and accounting practices.

From the industry's point of view, the most significant thing about the collapse of IBH is that none of its major operations have been rescued quickly.

By mid-February, three and half months after the group collapsed, only two of the subsidiaries had been taken over. A Hamburg businessman, Herr Ulrich Harms, bought Zettelmeyer, the West German maker of small wheel loaders and dozers, with turnover of about DM 200m and 800 employees. White Consolidated Industries of the U.S. has picked up Blaw Knox, the UK manufacturer of paving equipment, saving 160 jobs in Kent.

Elsewhere, the prospects look bleaker as time passes.

By far the largest subsidiary in the IBH group was Terex, the manufacturer of large off-road trucks, wheeled loaders and scrapers. Terex, with manufacturing operations in the U.S., Scotland and Brazil, accounted for about 40 per cent of total IBH turnover of DM 2bn.

Terex was acquired by IBH from General Motors of the U.S. in 1980 and GM became one of the largest shareholders in IBH with a 19.6 per cent stake. GM was also a major creditor and

Construction equipment

IAN RODGER

has been active in efforts to try and rescue the Terex businesses since the IBH collapse.

The U.S. Terex company is operating under Chapter 11 of the U.S. bankruptcy laws, the Brazilian subsidiary is still trading normally and the Scottish subsidiary went into receivership in mid-November.

This makes a solution complicated. Only a couple of very large companies would have the resources to acquire the entire Terex group and so far none of them has come forward. If the operations are to be broken up, there will be difficulties in assigning the rights to the name, designs and certain markets.

Late last November, General Motors ruled itself out as a possible rescuer of Terex, but last month, GM put up more than $3m to acquire the licence to operate the Scottish plant.

The other IBH subsidiaries appear to have fewer prospects of survival than Terex. Hymac, the UK excavator manufacturer, is in liquidation, as is Hanomag of West Germany. The French subsidiaries, the Maco Meudon compressor maker and Deruppe, the excavator maker, languish while awaiting a "French solution."

Still, even if none of the IBH subsidiaries is rescued, no one is predicting a rapid recovery in the construction equipment industry's fortunes.

Mr Eric Johanson, president of Volvo BM of Sweden and president of the European Committee for Civil Engineering Equipment (CECEE) forecasts further significant structural changes in Europe, but expects they will happen only gradually.

The Europeans are beginning to worry about the rise of Japanese competition in their home markets. So far, the advance of Komatsu, Hitachi and others has been felt mainly in Europe's traditional export markets in Africa and the Middle East.

But in the past three or four years, the Japanese have captured more than a quarter of the British market for hydraulic excavators, one of the few products for which demand has continued to grow through the recession.

The British manufacturers have been attempting to fend off the Japanese advance and have enlisted the support of CECEE. In the past few months, there has been evidence that the Japanese have acknowledged the problems that they have helped create, notably a 30 per cent fall in prices in the UK in the past two years.

Whatever happens, Mr Johanson believes that the industry must avoid promoting protectionist measures. The only solution is for manufacturers to become cost and quality competitive. He believes that this is possible because all manufacturers now have the same access to new technology for automating production.

Moreover, unlike manufacturers in sectors the Japanesa have already taken over, European construction equipment manufacturers are very much aware of the threat to their survival.

Computers cutting time and costs

IF Cementation International had not won the now controversial £300m Oman university contract, there is no doubt in the mind of Barry Myers, the managing director, that the work would have gone to a non-UK contractor. That would have been unfair, he adds, because Cementation is delivering a fast-track, four-year programme which he believes no one else could match.

The Sultan Qaboos project involves the construction of a university for 3,000 students, complete with all the auxiliary buildings and residences, on a desert site. Time is an important factor, and Cementation is cutting time in two different ways.

One is related to how the contract is managed. The contractor is fully in charge, directly employing the architects and specialist consultants. The drawings are computerised, both the architectural working drawings and the electrical and mechanical diagrams—a growing trend among many consultants as well. Another important management aid is stock computerisation, vital with over 12,000 items in store.

The second time-saving approach on the Oman contract is the casting of complete room units in tunnel forms or table forms, which allows for a 36-hour turnover of units for either low- or high-rise construction. The method is not new, but the techniques have been refined and the steel shuttering allows for in-situ casting of arches as well as the more ordinary square shapes.

Another refinement of existing technology allows for the casting of larger units and *beams which saves time* and gives more design flexibility.

On the other hand, the use of solar energy, which may have been thought a natural in such a warm and sunny climate, has been rejected as not being cost-effective.

The combination of improved, time-saving construction methods and the use of computers in design and draughting is gradually changing attitudes in what remains a very conventional and traditional industry. There are certainly two technological revolutions going on, but there is, for example, a growing realisation of the potential for speed in using composite profiled steel decks and composite beams.

The speed of construction of a *steel-framed building* is governed by the number of cranes that can operate simultaneously and the number of components to be lifted and placed.

If the floor is a precast concrete slab, the crane is required to place the slabs which are too heavy to be manhandled; in addition, a reinforced screed has to be laid on top of the slabs to get a level floor.

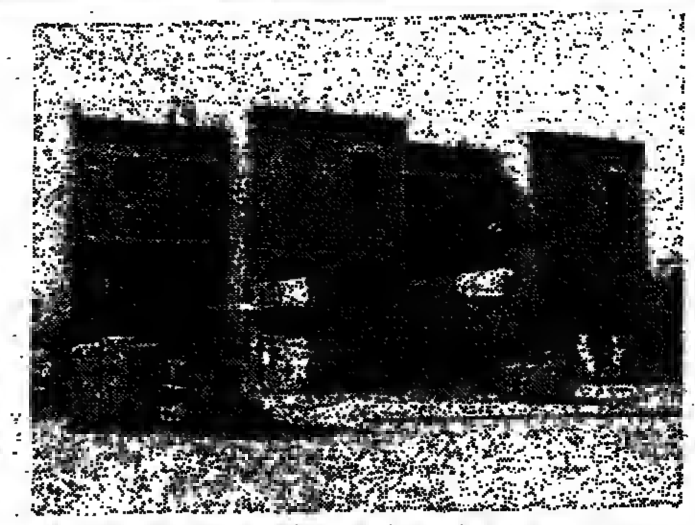
In contrast, a profiled steel deck can be lifted as a bundle, laid upon the beams—and then manhandled into position, freeing the crane for other work. A survey of construction times carried out by the construction steel association CONSTRADO has found time savings in the region of 5-10 per cent compared with steel frame with concrete floors and in the region of 20 per cent compared with in-situ concrete construction. Cost savings were made accordingly.

The future of steel-frame construction is being closely linked with the growth of computer design and detailing, coupled with automated fabrication processes. This will make steel members both cheaper and more accurately engineered. When construction on site becomes little more than assembling prefabricated components together, says CONSTRADO, then low-cost buildings will be produced which are efficient, pleasant to look at and very cost-effective.

Technology
MIRA BAR-HILLEL

One example of this, albeit on a small scale and mainly for the UK market, is the lightweight, steel-framed, highly insulated Yorkon building. This is a permanent structure, made by a subsidiary of Portakabin, and offering very competitive building costs compared with traditional construction.

The savings are most pronounced in the area of computer suites, of which Yorkon have already supplied over 18. Their cost per square metre is quoted at between £280 and £580, depending on specification, whereas traditional tender prices are in the £780-£840 range. Yorkon say it is cheaper to buy one of their suites than convert an existing building for computer use.



Staff housing completed showing blocked-in tunnel forms at the £300m Sultan Qaboos University, Oman. The project was carried out by Cementation International.

Many of Britain's top contractors have substantial investments in research and development. Wimpey have built up their laboratory at Hayes into a £30m business, and several of its specialist activities have already been "pushed out of the nursery" to stand up as commercial operations. For example, Wimpol is now a market leader in hydrographic surveying and navigation.

The hull of the world's first tension leg offshore platform is being completed by Highland Fabricators, jointly owned by Wimpey. It is expected to be the forerunner of many deep-water applications. The company also leads the world in designing and making connections in offshore structures with cement grout, aided by tiny nuclear sensors to detect when the liquid grout has reached its underwater destination.

The company is among the many who are using more and more computer technology. It has even built 150 micros to its own design and specification—and sold several of them to BP.

On the energy saving side, Wimpey have developed equipment which can look into a wall cavity without damaging it. Its infra-red thermography technique can locate zones of high heat loss from a building so that they can be corrected.

Consulting engineers W. S. Atkins have 25 years' experience of computers, 18 of them in-house. They are well aware of the rapid developments in the past few years in the use of computers, which for most of the early years were restricted to conventional accounting and calculating applications. Not any more.

Atkins have two computer-aided design (CAD) systems—one in two dimensions, the other in three. On a recent project for a large car park in Kuwait, out of some 1,300 drawings required, no fewer than 700 were done completely by computer. The time saved was substantial.

Atkins are not alone in believing firmly that in five years' time any professional practice not involved in computer technology, including CAD, will be out of it altogether. The writing, they say, is on the VDU.

EEC producers struggling with over-capacity

IT IS tempting to draw parallels between the cement and *steel industries* in the European Community. The product is basic and the industry is energy intensive. Like steel, the cement industry is struggling to rid itself of over-capacity.

Like steel, EEC cement producers are also facing an insidious attack on prices by relatively small volumes of imports from "third countries." Also like steel, demand for cement seems to be in terminal decline, or at least stagnating.

The *similarities* end there, however. One of the most forceful recent illustrations of this came in February when Lafarge Coppée, the biggest cement producer in France, and one of the biggest in the world, failed even to mention the state of its domestic market when it announced consolidated 1983 profits of $26m to $29.6m, up 220 per cent on 1982.

Like many leading European cement producers, Lafarge is now making its money in the U.S., having bought up plant from struggling U.S. cement makers in the late 70s. The steel producers, on the other hand, have nowhere else to go.

Unlike steel, the cement industry has found the means to its survival in the saturated Community markets not simply through closing old plant but by building even bigger works as improvements in manufacturing methods and transport have made nonsense of building a string of small plants as close as possible to particular markets. Lafarge is unlikely to lose much weight in the market by carrying out planned closures of five of its 19 French plants.

Even so, the 12.04 per cent fall in estimated EEC cement consumption between 1980 and the end of last year must worry producers. Belgium has suffered the worst decline of the EEC Ten, with consumption falling nearly 25 per cent to 4.2m tonnes of cement last year. The Netherlands cement market has also dipped sharply, by 22 per cent to 4.6m tonnes.

French consumption has fallen 18.6 per cent from 28m tonnes in 1980 while the West German market is nearly 17 per cent smaller than the 32.5m tonnes recorded *at the beginning of* the decade.

Falls of 6 per cent (to 13m tonnes last year) in Britain and 7 per cent (to around 6m tonnes) in Greece look positively encouraging by comparison. But the British market is jealously guarded by the three main producers, Blue Circle, Rugby Portland and FRZ Cement and imports have long taken, less than 1 per cent of the market, compared with about 5 per cent in West Germany and between 2 and 3 per cent in France.

The Italian cement market, the biggest in the Community, has proved to be altogether different. Between 1973 and 1982, Italy was the only European country to record a rise in per capita cement use, which moved from 648 kgs to 729 kgs per person—nearly double the French and West German figures. Between 1980 and 1983, total consumption has fallen only 1.9 per cent to 40.5m tonnes and was actually rising until the end of 1981.

The Italian producers, led by Italcementi, with some 36 per cent of the market and Unicem, with 13 per cent, give over just 0.4 per cent of their market to imports and they argue that only high port charges and difficulties *in transporting* bulk cement to the ports, has prevented them from exporting more aggresively.

Exports reached a peak 1.7m tonnes in 1979 but quickly slumped to 623,000 tonnes in 1982—some 1.5 per cent of total Italian output.

The adaptation to broadly lower demand throughout the Community has not come cheap. While building modern, efficient plant and scrapping obsolete and excess capacity may be the most obvious first step in dealing with recession, the difficulty has been to keep the market stable at the same time.

All Ten producing countries in the EEC have been able to raise prices since 1980, but it is becoming evident that real success has been at best patchy.

The cement makers themselves are reticent about making prices public, but informal research shows that the average per tonne price of bulk cement, ex works, in the UK was around £40.20 at the end of last year, up 20 per cent from 1980. French prices have risen only 10 per cent, to around £24.60. In Germany prices had moved nearly 31 per cent to £28 a tonne and in Italy by 32 per cent to £26 a tonne.

Those list prices disguise two important facts—costs have grown to such an extent that some prices being achieved (as opposed to being listed) might now be lower in real terms than in 1980 and in order to meet the challenge from third country imports substantial discounts are being offered to customers throughout all but the most inaccessible EEC markets.

Cement
PETER BRUCE

West German prices, for instance, rose nearly 6 per cent in January 1983, but there is now a real danger, industry observers believe, that West German producers may have to retreat so as to compete with cheap imports from East Germany and Poland. The politics of détente between the two Germanies appear to have opened the way for East German cement to take an ever-increasing share of the West German market even though that market *is shrinking*.

There are already signs of this happening in Northern Ireland. White Mountain Quarries, a Belfast-based ready-mixed concrete contractor, has been importing surplus West German cement into the province which was, until a year ago, considered the preserve of Blue Circle. White Mountain took about 25 per cent of that market in the first year, forcing Blue Circle into making a series of price cuts and threatening the future of at least one Blue Circle plant in the province.

White Mountain is now threatening to begin importing the same cement right into the heart of Blue Circle's UK domain—London—and fear of that move was almost certainly behind the big three UK producers' decision not to raise prices last December.

Whether the EEC producers can hold the ring against imports, and against the danger of *turning* on each other, remains to be seen.

** Converted from local currencies at relevant 1980 and 1983 dates.*

Note: See also West European Cement in Industrial Minerals, November 1983 edition.

INTERNATIONAL CONSTRUCTION V

Reviews of prospects in the main markets are given on this and the following page

NORTH AMERICA

Homebuilding lifts sector

THE U.S. construction industry, a key segment of the national economy as it extends its recovery from the post-1979 recession, has opened the year strongly, with every prospect of improving on the record performance achieved in 1983.

The keynote continues to be the strong expansion in housebuilding, which turned sharply higher last year as mortgage rates fell. The latest figures for housing starts show that the January total was the highest since the construction boom of 1978.

There is a cloud on the horizon in the form of renewed fears that interest rates may be about to rise once again, but these doubts have yet to penetrate to the construction market.

The rebound in homebuilding played a dominant role in last year's recovery in the construction markets, which had been severely restrained by the high interest rates prevailing between 1980 and the first half of 1982.

Last year's peak in new construction starts of $192.8bn was 23 per cent up on 1982. The bulk of the gain came from housing starts, which rose by 57 per cent to $93.2bn.

By contrast, non-residential building starts—offices and the like—rose by only 4 per cent to $61.9bn, while non-building construction starts, representing the much-needed extension and rebuilding of the battered roads and bridges of the major cities, put on only 1 per cent over the year to total $37.7m.

The progress of the industry—both residential and non-residential—has been difficult to estimate over the past two months because of the severe cold and winter weather in the central states of the U.S.

Overall activity was down in December, with the total of new construction starts dipping by 7 per cent below the comparable month.

The fall in residential building was modest, only 2 per cent lower than in December 1982. Fears that this might indicate a general slowdown seem to have been put at rest by the sparkling totals announced for last month.

Housing starts leapt by 15 per cent to an annual rate of 1.9m units in January. The substantial gain is central, not only to prospects for the construction industry, but also to those for the US economy in general.

Above all, it raises questions over the prospects for the credit policies of the Federal Reserve Board and thus for the outlook for interest rates which are crucial for the housing industry.

The recovery in non-residential building is still open to conjecture. Contracts for this sector fell by 8 per cent last month, with a sharp drop in office building "tipping the balance," according to the F. W. Dodge Division of McGraw Hill Information Systems which tracks the industry. The downturn reflects both national and regional trends.

Aided by boom

Economic developments swung in favour of tha north-eastern states in 1983, at least as far as the construction industry was concerned. Last year saw a continued boom in the financial services industries which in turn stimuleted rebuilding and renovation of business areas.

Tha New York financial district of Downtown Manhattan was expensively refurbished, encouraged by boom trading conditions for the stock markets and international banking sectors.

The Midwest, by contrast, bas suffered severely as the farming and heavy construction industries laid off staff and cut back on capital expenditure.

Contract value in the Midwest showed a 10 per cent gain last year, but this must be measured against the 32 per cent gain for the north-eastern states and the 23 per cent jump in the national everage.

The urge to cut back on public spending associated with the Reagan Administration has tended to focus on welfare spending rather than on investment in city infrastructures.

New York, having successfully restored itself to financial probity, has joined the ranks of major cities raising funds in the capital markets for extensive rebuilding of its decaying roads and bridges.

This concern for state infrastructures was reflected in a 24 per cent increase last year in spending on highways and bridges. The total benefited significantly, although as yet unquantifiably, from the five cents per gallon fuel tax levied for the purpose since April 1883.

In addition, some $5bn of Federal highway disbursements to the states was held back when Congress adjourned, but will be brought forward this year. This holdback is blamed for much of a downturn in December in highway construction.

Not even the most naive observers expects such direct Federal input to the expenditures of the states to be delayed in presidential election year, so—no matter what the Federal Reserve may think of the Federal budget deficit, highway spending seems likely to improve this year.

The fortunes of the construction industry in the current year will, in fact, mirror the fortunes of the U.S. economy even more closely than usual.

Terry Byland

World markets brighten

IN SHARP CONTRAST with the experience of European companies, American companies seem to be faring better in world markets.

Their domestic workload is picking up, and they are also cheerful about their overseas prospects.

The message from Bechtel president Mr Alden P. Yates, is that the company has not experienced any downturn in its Middle East business and remains optimistic. Fluor Corporation president, David S. Tappen was also confident.

"We have seen our workload increase in three consecutive quarters, signalling a progressive recovery from the prolonged industry wide recession," he said. "The man-hours booked by the company's engineering and construction division increased by more than 140 per cent in the first quarter of fiscal 1984 compared to 1983."

Fluor won contracts worth more than $1bn in the first quarter of fiscal 1984, compared to $1.2bn for the whole of fiscal 1983, and though the company does not disclose how much of this upturn is based on domestic as compared to non-domestic work, it says that it is today "tracking 18 megaprojects in the Middle East," the company's most important overseas market. These are worth a total of $38bn, compared to only 20 megaprojects during tha last five years, worth a total of $37bn.

A more cautious note, however, is sounded by Braun's president, Mr Baird. "There are more signs of e build-up of business," he said, "bnt our bookings will lag tha recovery. The question is, how long will it be before we get a real upturn in the economy. My crystal ball, like everyone else's, is fuzzy on that point."

AFRICA

Large-scale projects are scarce

WHILE the Middle East and South-East Asia continne to see high levels of construction activity, Africa (particularly Black Africa) has to struggle to maintain existing levels of work.

The global recession is precipitating a decline in economic growth in relation to the rest of tha world and also in absolute terms. Export earnings are down and foreign indebtedness is high—in most instances above levels that can be serviced without recourse to debt rescheduling.

Increased borrowing from commercial banks is unlikely—even concessionary finance from agencies such as the World Bank and affiliates, tha European Development Fund, and bileteral credit institutions. They are now by far the most important sources of finance and will fall in 1984, as they have done for the past three years.

According to Construction Data Research Services, Africa (including North Africa) accounts for about 7 per cent of world construction activity. The biggest construction markets in sub-Sahara Africa are South Africa, Nigeria, the Ivory Coast, Kenya, and the Cameroon. South Africa's stagnant economy now shows signs of reviving after three years in the doldrums.

Housing starts are climbing and a fuel levy will finance new toll roads. Energy-related schemes like South Africa's first nuclear power station at Koeberg, north of Cape Town, will be given priority.

The overall picture in Black Africa is characterised by the absence of large-scale prestige projects and a concentration on the road-building, hydro-electricity, water, irrigation, and offshore sectors. The need to reduce imports will encourage more industrial building.

European contractors had 36 per cent of the African construction projects in 1982. Hitherto, British, French, German and Italian companies had almost free rein in a market influenced by ex-colonial links. Today, the continent is wide open.

The traditionally British markets in Nigeria and East Africa are being challenged by French companies from their bases in French West Africa. Some 33 per cent of French African contracts in 1982, valued at about £1.5bn, came from English-speaking countries. British companies increased their share of work in Africa in 1983 to about £800m (30 per cent of their total overseas orders) but have yet to make the same impact in Francophone countries.

British consultants have done better in water supply and road building work. French successes may well be due to their specialised in-house design work for turnkey projects, thus bypassing the traditional role of the consulting engineer.

More contractors see this approach as a way of cutting costs and becoming more competitive, and the competitive edge may well go to companies willing to enter into multinational joint ventures which carry donor government support.

One example is the £40m contract placed with Sweden's Skansa and Canada's Foundation Company for the Kiambere hydro-electric project in Kenya. The consortium also includes—for the later stages—German and Yugoslav companies. Parts of the contract will be financed by the Swedish and Canadian Governments.

Closer look

Inevitably, the Jepanese are taking a closer look at Africa. Jepan still classifies itself as a "developing country" for construction exports. Japanese firms are working on a £198m power station in Nigeria, while Ishikawajima-Harima Industries (IHI), main contractor for the important Matadi suspension bridge in Zaire, is looking at several other big projects.

Taisei, one of Japan's two leading civil engineering contractors, established a joint venture in Nigeria in 1979 and is the first Japanese concern to invest in Africa. It now has three contracts there.

With the fall-off in Middle East contracts, South Korea's formidable Hyundai Group, with its turnkey skills in desalination and petrochemical work, is also considering further work in Africa. The high skill of Italian contracting in Africa is led by such companies as Impregilo, Cogefar and Impresit. The last two recently received letters of intent to build roads in the Cameroon worth £65m.

British experience in waterworks projects has helped British firms to win some useful contracts. Costain (West Africa) is now working on a £100m water supply scheme in Nigeria's Oyo State, while Biwater Shellabear Group are well into a £141m turnkey project to provide water for 500,000 people in 18 communities.

Alan Peterson
Editor, International Construction

LATIN AMERICA

Recession hits state schemes

THE DRAMATIC economic recession throughout Latin America in the past year has inevitably meant a substantial decline in both public and private sector construction activity with little prospect in the short- to medium-term of a recovery.

In virtually every country of the region a combination of austerity measures, cuts in development programmes, reduced foreign investment, lack of hard currency and stiff import controls have ensured that both domestic industries and foreign construction companies and suppliers have suffered accordingly.

The main hope for foreign suppliers of construction materials, equipment and services has been projects coming under bilateral aid programmes or involving multilateral lending agencies.

In Brazil the construction sector last year produced its worst performance for 20 years and prospects for the next couple of years remain very poor.

All the sectorial indicators make gloomy reading. Last year 75 per cent of the businesses in civil construction operated with at least 40 per cent idle capacity and for 58 per cent of the companies the level of idle capacity was at least 50 per cent. Cement production for this sector fell 19 per cent from its 1982 level.

Civil construction groups do not expect demand to pick up before 1985 at the earliest because of the enormous backlog of completed residences which must first be sold.

The Brazilian heavy construction sector's performance has been even more disappointing. As this sector is heavily dependent on public works it was badly hit by the 15 per cent cut in real terms in investments by state-owned companies last year.

Part of the reason for the severity of the crisis last year was the completion of several big projects such as the Itaipu and Tucurui hydro schemes and the Tubarao steel mills, without a corresponding start being made on new projects.

With prospects so grim, the only way for construction companies to survive is through an increase in exports especially to other developing countries.

Mexican decline

In Mexico, the construction industry has gone from boom to bust in just 16 months. The sharp decline in the industry's fortunes which began in the middle of 1982 went into overdrive following Mexico's financial collapse later that year.

The new administration of President Miguel de la Madrid, who assumed office in December 1982, was forced to make drastic cuts in public spending as petroleum revenues plummeted.

Preliminary estimates for public construction activity in 1983 for instance predict revenues to be worth only 27 per cent of those in 1981, representing the lowest level of activity for 11 years.

A recent report by the economic studies department at Banco Nacional de Mexico (Banamex) estimates that construction activity will show slight growth this year but that recovery to the levels established in 1981 is most unlikely till after 1985.

Banamex points out that the main factors affecting tha industry are the levels of private and public sector investment. "Taken together these will show only slight growth in 1984," it states. In real terms the former is likely to grow by 3 per cent while the latter could show negative growth due to plenty of unused installed capacity in most companies.

Judging by government commitments most of the growth is likely to come from infrastructural projects such as road and rail communication, low income housing and projects for generating electricity. There might also be some increased activity in state enterprises that underspent their 1983 budget. State steel and fertiliser firms fall into this category.

Banamex notes that the construction materiala industry is likely to grow faster than construction itself. This is because there are plans to boost exports (cement manufacturers claim they will double their overseas sales this year) and industry analysts expect a big growth in the trend to do-it-yourself building by would-be home owners, small businessmen and peasant farmers.

Venezuela's construction industry bas been in trouble for the past five years and suffered another bad year in 1983. Tha outlook for 1984 remains uncertain.

Figures released recently by the Venezuelan Construction Chamber, a private sector group, showed that the industry's gross domestie product fell last year by 8 per cent against a 4.5 per cent fall in the economy's overall gdp. In constant Bolivars, the value of construction work last year was Bolivars 3.9bn, off 9 per cent from the previous year.

Private sector housing starts for 1983 (public sector not yet available) were 11,000, down from 35,000 in 1982 and 30,000 in 1981. The national housing deficit is estimated et about 800,000 to 1m units. Meanwhile, unemployment, estimated to be 15 per cent nationwide stands at just under 50 per cent in the construction industry, according to union estimates.

One of the few rays of light on the Latin American construction horizon is Colombia. Construction was one of the country's growth sectors last year with the industry's share of gross national product growing by 3.1 per cent from the previous year accounting for $1.724bn of the total $17.716bn.

In proportion to its resources Colombia has the largest investment programme in Latin America and, unlike many of its neighbours, will be able to sustain this programme in the coming years. During the free spending and free borrowing 70s Colombia adopted a conservative approach to its economic policies always keeping growth within manageable limits.

Colombia's heaviest construction spending is in electrical infrastructure and 18 out of 76 projects planned under the country's 1983-86 Development Plan are in this sector.

The second largest area of expense is related to the $3.2bn El Cerrejon coal project. Some 50 per cent of that sum is being dedicated to the building of port, railroad, mining and housing facilities.

Philip Marvin
Editor, Latin American Markets

EUROPE

Barriers remain

ALTHOUGH THE aims of the European Community include the creation of a "common market" for all sectors of industry, the special nature of construction does not lend itself easily to this, according to Mr Derek Gaulter, director general of the Federation of Civil Engineering Contractors.

There are two substantive reasons for this. Each of the member states has a construction industry and construction professionals which are long-established, competent and highly competitive. In addition, each country has different contractual practices, construction codes and building rules and regulations—and even simple language barriers do exist.

The constraints, naturally, work both ways: one does not see many French or German contractors on UK sites either. This is perhaps the reason why the present situation is accepted rather stoically by the contractors themselves. Attempts to change it and concern about it being expressed more by the European Commission than by the supposed "victims" of the failure to pool construction resources Europe-wide.

Viscount Davignon is unhappy that the Community-wide advertising of contracts through the Official Journal, which was intended to open the barrier, has failed to make any inroads into the staunchly nationalistic nature of awarding contracts. The system requires that all contracts worth more than a million European currency units (Ecus) which is about £650,000, be so advertised.

Mr Gaulter maintains that the UK has a good track record in complying with this requirement, but his federation would like to see the limit raised substantially.

He also feels that some members states avoid advertising by breaking down single projects into separate contracts, so that each ends up being worth less than the qualifying minimum.

Another measure intended to remove barriers is the promotion of Euro-codes on construction practice. Progress on these, some of which cover reinforced concrete structures, steel structures, and earthquake protection, has been described by Mr Gaulter as "painfully slow," and there is grave doubt whether they will ever emerge from the draft stage.

The exceptions which prove the rule do, however, also exist. Frene-O'Neil, a British-Irish joint venture, has been involved in the £630m alumina extraction plant in the Shannon estuary under a contract worth £70m for mechanical plant.

Laing SA are building a £51m borstal for 456 young offenders in Spain. Costain Civil Engineering have won a £3m contract to design and construct an oil jetty in Greece.

For consultants, too, Europe is not fertile ground. Again, there are the exceptions, among them GCB International Design Group which has recently completed the renovation and refurbishment of Don Carlos Hotel in Marbella and a feasibility study for a large scale tourist development in Lanzarote which it did in conjunction with Ove Arup.

The scene is very different for chartered surveyors, but their European activities are much more in the property rather than the construction sphere. Their advice on rating, letting, lease negotiating and project management is highly valued in Belgium, Luxembourg, the Netherlands, France and Germany.

When the Standard Chartered Bank acquired and altered the former Canadian Embassy building in Paris, no fewer than three firms of UK chartered surveyors were involved: one acted for the vendors, one for the buyers, and the third were quantity surveyors and project managers for the alterations.

The sale of the headquarters of Germany's largest shipping company, together with its lease-back from an insurance company, was also handled by British professionals.

Europe's construction industries are hopeful of a further slackening of the recession in 1984, if not its end. Industrial output in the EEC, which was down in the last six months of 1982, rose—albeit slowly—in 1983 and the inflation rates were falling. Unemployment is still rising—but at a slower rate.

In 1983, the output of the construction industries of Denmark, Italy, France, Germany, the Netherlands, Belgium and Great Britain was done 1.3 per cent on the previous year—a depressing statistic, but not as gloomy as the −4.6 per cent and −3.6 per cent recorded in the previous two years.

For 1984, the International European Construction Federation (FIEC) forecasts a "consolidation of construction activity at the 1983 level." Slight improvements may take place again in Britain and Germany, and possibly in Belgium and the Netherlands as well—but construction activity elsewhere in Europe will continue to fall.

Housebuilding, which kept the industry out of the dumps in Britain, Germany and Belgium in 1982, is expected to rise in Belgium, fall in Britain and stabilise in Germany. For non-residential buildings, the −2.9 per cent slump recorded in 1983 is expected to stop. For public works, the 4.2 per cent reduction in 1983 will slow to only −1.1 per cent, the Federation predicts.

Mira Bar-Hillel

THE MIDDLE EAST

Foreign contractors still in demand

ACCORDING TO the organisers of the ArabBuild exhibition and conference to be held in Bahrain in November, the slowdown in the Arab construction market has been "much exaggerated," and is due primarily to the "completion of infrastructure projects in some of the major cities such as Jeddah and Dubai."

It points out that completely new cities continue to be built, and that in some of the region's older markets where most of the infrastructure has been completed there is a secondary construction boom.

There is certainly something in what ArabBuild's promoters say. Oil glut or not, it was inevitable that there would be an eventual slowdown in business after the years of new found oil wealth.

The downturn in oil revenues has concentrated the minds of the region's planners and encouraged an increasingly tough-minded attitude towards construction projects and the role of foreign companies.

A major development in the construction market is the growing importance of Arab contractors and consultants. In a book entitled The Arab Construction Industry published this year by Croom Helm, a leading Arab technology and manpower consultant Dr Antoine Zahlan argues for increased local participation in the building industry to improve the transfer of Western expertise.

He calculates that local inputs accounted for only 25 per cent of the total inputs to the $600bn worth of construction projects carried out in the Arab world in the past two decades.

Gulf governments have been particularly keen to bolster local companies and have introduced legislation that makes it more and more desirable for foreign companies to enter into joint ventures with indigenous partners.

Figures on new contract awards since the extraordinary boom years of 1980 and 1981 reflect the impact of lower oil revenues and the Gulf war.

From a level of $74bn in 1981 the value of new contracts in the Middle East plummeted to $44.6bn in 1982 according to Middle East Contracts: Directory and Analysis (MECDA).

In the first half of 1983 the total value of new contracts reported in the Middle East Economic Digest (MEED) dropped to $23.7bn from $27.6bn in the same period of 1982.

Saudi Arabia once again led the field in 1983, although MEED estimates that its awards fell substantially for the year as a whole to $17.6bn compared with $27.1bn in 1982. Despite Iraq's continuing battles with Iran and its precarious financial *position, it still managed to* take second place with a MEED estimate of $8.7bn worth of new contracts.

Contractors in Iraq and Libya experienced severe payments problems in 1983, and many have been forced to accept deferred payment deals, and oil barter arrangements. Payment delays caused headaches for contractors in a number of other states, notably the United Arab Emirates.

The mechanics of construction financing has become of ever pressing concern to the region's contractors and bankers alike, and in January the Arab Bankers' Association and Bovis International held a three-day seminar in Abu Dhabi on bonds, guarantees and other aspects of the banker-contractor relationship.

Rewarding

For all its recent problems, the Middle East market will continue to be rewarding for the foreign contractor and consultant. There are tantalising prospects in sight when the Gulf war is over.

In remarkably confident mood, Libya last November signed what is said to be the largest ever contract in the Middle East. Worth $3.3bn, the contract awarded to Dong Ah Construction Industrial Company of South Korea is for a "man-made river" to carry water to the country's coastal city.

The Gulf states will continue to provide a steady stream of major projects.

Algeria is an increasingly interesting part of the market, with rapid and sustained growth. It has made a point of linking contract awards with gas sales and this has worked very much to the benefit of the French and the Italians.

Susannah Tarbush
Business Editor,
The Middle East

SOUTH EAST ASIA

Moving into high gear

AMONG THE developing countries, the Association of Southeast Asian Nations (ASEAN) seems to have been in the best position to ride out the difficult economic environment.

Many countries in the region were worried 12 months ago when they saw their growth rates fall from the 10 per cent of the heady 1970s to about 5 or 6 per cent. But everything is relative: the industrialised world was stagnating at about 2 per cent growth at the time.

The economic problems affected construction, as in any other part of the world, but the base level of activity remained fairly high and the turn of this year has shown good trends for the industry in 1984 and beyond.

ASEAN is increasingly recognised as one of the safest markets for construction industry, and one of great hope *for the future.*

The World Bank poured nearly US$2,400m into ASEAN projects in the past financial year (up to June 1983), about half of which went to cover 12 projects in Indonesia. The next largest ASEAN borrower was the Philippines, then Thailand and finally Malaysia. About the same time approximately US$1bn has been agreed in soft loans from Japan, and many other countries have bilateral agreements.

The Asian Development Bank (ADB) put nearly US$900m into the same four countries in 1982. ADB funds went towards development projects totalling US$2bn in Indonesia, US$2,761m in the Philippines, US$1.48bn in Thailand, and US$150m in Malaysia.

The bank estimates that 70 per cent of these funds end up in the construction industry's coffers.

Looking first at Singapore, most people's gateway to the region, the *construction* industry has shown a remarkable, but locally not unusual, growth rate of 31 per cent in the first half of 1983.

Similar figures were achieved the year before. As well as a very active private sector, Singa*pore's government has an* extensive programme of construction work.

Plans to build a further 100,000 units of public housing by 1985 have been speeded up; and civil work has begun on the US$2.25bn mass rapid transport project, with the Japanese and French taking a good share.

Private sector work, covered by S$3bn worth of building plans approved last year, includes large projects of prestigious hotels, offices and shopping centres.

Across the causeway in Malaysia, the situation was bleak for a year or so until 1983 saw the commodity price slide reversed. A trade surplus is forecast for 1984, for the first time in a few years, of M$2.5bn and the construction industry is expected to achieve a 9.2 per cent growth.

Private construction activity increased to a high level last year, particularly around Kuala Lumpur, because of improved commercial lending.

The main impetus is non-residential work, particularly hotels as they received investment incentives in 1982. The upswing is expected to continue through to 1986.

The Government will become a big spender again this year with construction of two deep sea ports at Songkhla and Phuket, Thailand's first cable *stayed bridge, a multi-kilometre* bridge across Songkhla Lake, a petrochemical complex and two major ports on the Eastern Seaboard industrial area.

Indonesia has had a rough 18 months or so as it depends largely on its oil for foreign ex*change earnings.*

Work in progress includes port construction, downstream industrial development, a new US$317m power project, irrigation work, road projects and many rural development schemes.

Finally, the tiny oil sultanate of Brunei, with the highest per capita income in the world, is expected to spend about US$300m on construction work next year. But nothing could compare in scale or grandeur to the new palace/government centre being completed there this year—at an undisclosed cost.

Nicola Carr